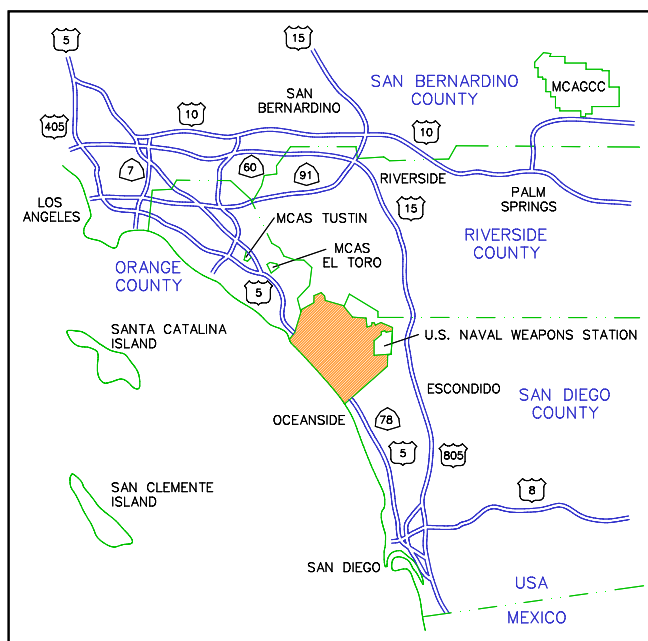


***Summary Report
of Remedial Action Activities
at Site 1523
Marine Corps Base Camp Pendleton***



Prepared for



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1220 Pacific Highway
San Diego, California 92132-5190**

**Contract No. N47408-01-D-8207
Task Order No. 0102**

Battelle

**Environmental Restoration Department
505 King Avenue
Columbus, Ohio 43201-2693**

September 2005

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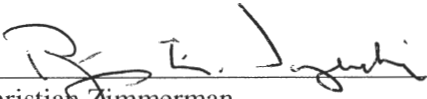
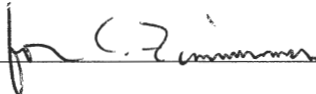
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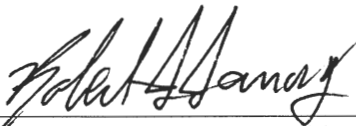

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ABBREVIATIONS AND ACRONYMS

AB	Assembly Bill
AC/S ES	Assistant Chief of Staff Environmental Security
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, total xylenes
CAP	Corrective Action Plan
CSWRCB	California State Water Resources Control Board
DEH	(San Diego County) Department of Environmental Health
DON	(U.S.) Department of the Navy
FID	flame ionization detector
IRAP	Interim Remedial Action Plan
IT	International Technology Corporation
LUFT	leaking underground fuel tank
LNAPL	light, nonaqueous-phase liquid
MCB	Marine Corps Base
MCL	maximum contaminant level
NAVFAC	Naval Facilities Engineering Command
NFESC	Naval Facilities Engineering Service Center
NPWC	Navy Public Works Center
PAH	polycyclic aromatic hydrocarbon
PRG	preliminary remediation goal
RPM	Remedial Project Manager
RWQCB	(California) Regional Water Quality Control Board
SAM	Site Assessment and Mitigation
SPLP	Synthetic Precipitation Leaching Procedure
SWRCB	State (of California) Water Resources Control Board
TMB	trimethylbenzene
TPH	total petroleum hydrocarbons
TPH-D	total petroleum hydrocarbons quantified as diesel
TPH-G	total petroleum hydrocarbons quantified as gasoline
TPH-MO	total petroleum hydrocarbons quantified as motor oil
TRPH	total recoverable petroleum hydrocarbons
UST	underground storage tank
U.S. EPA	United States Environmental Protection Agency
VOC	volatile organic compound

Executive Summary

This Summary Report was prepared for former underground storage tank (UST) Site 1523, Marine Corps Base (MCB) Camp Pendleton. This Summary Report contains available background information and documents the remedial action activities performed at the site in July 2005.

Site 1523 is located in Area 15 on the east side of MCB Camp Pendleton and consists of Building 1523 and the area that formerly contained two USTs and associated piping. The USTs were used to store diesel fuel for heating purposes. Because of the proximity of the two tanks, the site is simply referred to as Site 1523. In September 1996, the USTs (one [1] 1,000-gallon reinforced concrete and one [1] 1,500-gallon reinforced concrete) and associated piping were removed from Site 1523 by the United States Navy Public Works Center (NPWC). Samples collected prior to and during removal of the USTs indicated that petroleum hydrocarbons had leaked from the tank, which necessitated follow-on site assessment activities.

Following the preliminary site investigation activities conducted by IT Corporation and the NPWC, Ninyo and Moore conducted an extensive site assessment to determine the lateral and vertical extent of petroleum hydrocarbons in the soil and groundwater. Based on soil sample analytical results collected during each of these events, it appears that petroleum hydrocarbon-impacted soil at Site 1523 is limited to the former tank cavity. The maximum total petroleum hydrocarbons (TPH) quantified as diesel (D) concentration that has been detected is 12,000 mg/kg, and is located in the center of the former UST excavation at approximately 10 ft below ground surface (bgs). In addition to TPH-D, the following major petroleum constituents and respective maximum concentrations were detected at Site 1523: total recoverable petroleum hydrocarbons (TRPH) [5,130 mg/kg], 1,2,4-trimethylbenzene (TMB) [1,000 mg/kg], 1,3,5-TMB (590 mg/kg), and naphthalene (1,600 mg/kg). Furthermore, leachable concentrations of 1,2,4-TMB (1.9 µg/L), 1,3,5-TMB (1.1 µg/L), naphthalene (17 µg/L), and methylene chloride (42 µg/L) are present in the former tank cavity at Site 1523.

Because both groundwater and soil are impacted at the site, the need for additional corrective action was evaluated as part of a Corrective Action Plan (CAP) submitted in October 2003 (Battelle, 2003). Of the three remedial strategies evaluated, soil excavation with additional groundwater monitoring well installation and continued groundwater monitoring was the preferred method after discussion with the San Diego Regional Water Quality Control Board (RWQCB). A finalized Interim Remedial Action Plan (IRAP) was submitted in May 2005 and outlined the planned excavation activities for Site 1523. The document was approved by the RWQCB in early July 2005. In mid-July 2005, approximately 512 yd³ of total material was excavated from the site. Post-excavation calculations have determined that approximately 97 yd³ of TPH-D contaminated soil at concentrations >1,000 mg/kg were excavated, which accounts for a 90% by volume removal. Similarly, 131 yd³ of contaminated soils at concentrations >500 mg/kg were excavated, which accounts for a 75% by volume removal. Currently, approximately 40 lb of TPH-D at concentrations >1,000 mg/kg remains in place at Site 1523, accounting for a 93% TPH-D mass removal. Similarly, approximately 99 lb of TPH-D at concentrations >500 mg/kg remains in place at Site 1523, accounting for 86% TPH-D mass removal. This report summarizes in more detail the excavation activities which took place at Site 1523.

Section 1.0: Introduction

This Summary Report was prepared for the United States Department of the Navy (DON), Naval Facilities Engineering Command (NAVFAC) Southwest under Task Order No. 0102 of Naval Facilities Engineering Service Center (NFESC) Contract No. N47408-01-D-8207. The report addresses former underground storage tank (UST) Site 1523 at Marine Corps Base (MCB) Camp Pendleton.

1.1 Objectives

The objective of this report is to summarize remedial action activities conducted at Site 1523. This site, located at MCB Camp Pendleton, is regulated under the California State Water Resources Control Board's (CSWRCB) Leaking Underground Fuel Tank (LUFT) program as administered by the CRWQCB. The document guiding the assessment, remediation, and closure process at the site is the *Site Assessment and Mitigation (SAM) Manual* (DEH, 2004). Cleanup requirements for environmental media that are contaminated as a result of these releases are specified in other regulations and guidance. Figure 1 is a flowchart that summarizes the site assessment and mitigation process in San Diego County. Site 1523 currently is in the CAP process. Based on the results from the site assessment (Ninyo and Moore, 2000) and consultations with MCB Camp Pendleton and NAVFAC Southwest, hot spot excavation of petroleum hydrocarbon-impacted soils was performed at Site 1523.

The following subsections of Section 1.0 describe the site background and location. Section 2.0 provides a summary of the remedial action activities performed in July 2005. The nature and extent of soil contamination is discussed in Section 3.0 and conclusions are presented in Section 4.0. Bibliographic data for references cited in the text are provided in Section 5.0. Appendix A contains documentation of the remedial action activities.

1.2 Site Background and Location

Site Address:	Site 1523 MCB Camp Pendleton, CA 92055
Facility Name:	Administration Offices
DEH Case No.:	H05939-014
CRWQCB Case No.:	9UT634
Property Owner:	United States Marine Corps
Tank Owner:	United States Marine Corps
Tank Operator:	United States Marine Corps
MCB Contact:	Mr. Chet Storrs, Assistant Chief of Staff Environmental Security (AC/S ES) Building 22165 Camp Pendleton, CA 92055-5008 (760) 725-9774
Remedial Project Manager (RPM):	Mr. Bipin Patel, NAVFAC Southwest Code OPCE.BP 937 N. Harbor Drive Camp Pendleton IPT, Bldg. 1, 3rd Floor San Diego, CA 92132-5190 (619) 532-4814
Responsible Party:	United States Marine Corps.

1.2.1 Site Description. Site 1523 is located in the 15 Area of Camp Pendleton Mainside (Figures 2 and 3). The site consists of Building 1523 and the area that formerly contained two USTs and associated piping (Figure 3). Because of the proximity of the two tanks, the site is simply referred to as Site 1523. Prior to removal, one (1) 1,000-gallon and one (1) 1,500-gallon reinforced concrete UST existed at the site. Both USTs contained diesel fuel that was used to heat Building 1523. The 1-inch supply-and-return pipelines extended laterally to the building and below ground surface (bgs).

1.2.2 Tank Removal. In September 1996, the UST and associated piping were removed from Site 1523 by the United States NPWC. Excavation dimensions were approximately 12 ft by 15 ft and 7.5 ft in depth. Following UST removal, NPWC personnel collected soil samples from below the former tank and in the test pit. Samples were not collected below the former piping. Samples were analyzed for total recoverable petroleum hydrocarbons (TRPH) by United States Environmental Protection Agency (U.S. EPA) Method 418.1 and total petroleum hydrocarbons (TPH) quantified as gasoline (G) and as diesel (D) using U.S. EPA Method 8015 Modified (8015M).

Section 2.0: Remedial Action Activities

The site assessments conducted by Ninyo and Moore indicated that soil within and around the former tank cavities were contaminated with petroleum hydrocarbon constituents (Figure 4). In consultation with MCB Camp Pendleton and NAVFAC Southwest, Battelle excavated approximately 512 yd³ of total material from the former UST 1523 tank cavity and surrounding area in July 2005. Planning and implementation of the interim remedial action were conducted as outlined in the remediation work plan of the *Final Interim Remedial Action Plan for Site 1523, Marine Corps Base Camp Pendleton* (Battelle, 2005). The San Diego RWQCB concurred with the recommended corrective action of source zone excavation of TPH contaminated soils and approved the Interim Remedial Action Plan (IRAP) on July 1, 2005.

2.1 Field Implementation

Field implementation of the remedial action at Site 1523 was initiated in two phases with preparatory activities being conducted during the few weeks prior to the start of the remedial action and the actual excavation commencing the week of July 11, 2005.

2.1.1 Preparatory Activities. An on-site meeting between representatives from Building 1523, AC/S ES office, and Battelle was conducted on June 29, 2005 in order to discuss the logistics of the upcoming field work. The topics of discussion included defining controlled access areas, equipment and stockpile staging areas and health and safety issues. Signs containing point of contact information were posted at Building 1523 and surrounding buildings. On July 8, 2005, subsurface utilities were located by Southwest Geophysics of San Diego, CA.

2.1.2 Excavation Activities. On July 11, 2005 following a health and safety tailgate meeting, Site 1523 was readied for excavation by first removing an existing planter bed and demolishing a defunct concrete condensate tank with the use of a backhoe. EFR Environmental Inc., of Alpine, CA performed the excavation activities at Site 1523. In addition, portions of the parking lot were saw cut and the waste asphalt removed. Both the waste asphalt and concrete were stockpiled separately for later disposal at an on-base recycling facility. A portion of the clean soil from the planter bed was used to create a berm in preparation of stockpiling the contaminated soil. The remaining clean soil was stockpiled nearby for later use as clean backfill.

On July 12, 2005, soil excavation commenced following a health and safety tailgate meeting and was concentrated at the former UST tank cavity area. An excavator was used for the remainder of the soil removal effort. The upper 1.5 ft of clean overburden soil was removed and stockpiled nearby for later use as backfill material. The lithology of the clean fill was described as loose silty sands and sandy silts. Contaminated soils became evident after 1.5 ft bgs and were temporarily stockpiled separately. Air monitoring of the excavation and soils was performed using a flame ionization detector (FID) to ensure worker safety as well as the safety of those within the vicinity of Building 1523 during the field activities. When the excavation reached 2.5 ft bgs in areas that were located outside the former UST cavity, the lithology of the removed material changed to that of a mud-supported conglomerate composed of well-rounded cobbles and boulders up to 2 ft in diameter. The matrix of the conglomerate was loose and composed of silty sand and gravel and the boulder-sized clasts were predominately composed of weathered granodiorite. This geologic unit, referred to as the Lusardi Formation (Furu, 1982) was encountered before at former UST Site 1575 and is prevalent beneath most portions of the 15 Area (Battelle, 2002).

When the excavation reached a depth of 10 ft bgs, more heavily contaminated soils were encountered. It was observed that within the conglomerate, most of the contamination was present within the sandy matrix. However, the majority of the cobbles and boulders that were located within the immediate vicinity of the former UST cavity were friable and heavily weathered from the diesel impacts. TPH odors and staining were evident within many of these clasts when they were broken open. When the excavation reached a depth of 12 ft bgs (or 13 ft in few locations), the lithology changed to that of the basement complex which consisted of granodiorite. Continued digging was not possible because the excavator could not penetrate the consolidated basement rock.

At this point, approximately 300 yd³ of contaminated soil was removed and preliminary grab confirmation soil samples were collected along the sidewalls (1523-SW1 to 1523-SW7) and bottom (1523-BS1 to 1523-BS6) of the excavation (Figure 5). The purpose of collecting the preliminary confirmatory soil samples at the time was to screen the current soil concentrations and gauge how much additional soil removal was necessary. Sidewall samples were collected at 10 ft bgs where historical data had shown the more heavily concentrated contamination to exist (Figure 4). All basal samples were collected at either 12 or 13 ft bgs, depending on where refusal was encountered. All soil samples were collected through the use of the excavator bucket and initially placed within ziplock bags for the purpose of conducting headspace measurements. After the bagged samples were given an opportunity to warm up, the resulting vapors in the bags were measured using the FID. Based on the FID readings, four selected samples (1523-SW4, 1523-SW5, 1523-SW6, and 1523-SW7) were chosen and sent immediately by courier to H&P Geochemistry of Escondido, CA for 24-hour turnaround analysis of TPH-D.

Several factors enabled the excavation to proceed immediately adjacent to Building 1523 where more of the heavily contaminated residual TPH-D soil was present. The northern end of the building where the excavation was performed is constructed on a concrete slab as opposed to concrete piers and provided additional structural integrity. In addition, due to the consolidated nature of the conglomerate, the sidewalls of the excavation were vertical and not sloped, enabling the maximum amount of soil removal adjacent to the building without compromising the building.

Prior to the end of the day, all contaminated soils removed were transported to a separate staging area where the lined berm was constructed. The stockpile was tarped to prevent both organic vapors from being emitted as well as surface runoff in the event of precipitation. The open excavation was secured overnight using temporary fencing.

On July 13, 2005, following a health and safety tailgate meeting, seven trucks arrived on site to begin transporting the stockpiled contaminated soils to Candelaria Environmental of Anza, CA for disposal after waste manifests were signed. The same trucks returned later in the morning to pick up and haul away the remaining soils. Analytical results from the preliminary grab confirmation soil samples were received verbally from the laboratory during mid morning. Significantly higher TPH-D concentrations were unexpectedly reported: 4,200 mg/kg from 1523-SW4, 3,500 mg/kg from 1523-SW5, 5,000 mg/kg from 1523-SW6, and 2,000 mg/kg from 1523-SW7 (Figure 6). In response to the reported results, continued excavation proceeded along the northern sidewall where 1523-SW4 and 1523-SW5 reported elevated TPH-D concentrations. Also, additional asphalt was saw cut and removed enabling continued digging along the southern sidewall where 1523-SW6 was sampled (Figure 5). After additional soils were removed from both the northern and southern ends of the excavation, it appeared that TPH concentrations decreased based on visual observations and field screening methods. Based on these field observations and after approximately 512 yd³ of material was removed, it was decided that the goal of hot-spot removal of the bulk of heavily contaminated TPH soils was accomplished. The over-excavated soil was temporarily stockpiled and tarped until it could be disposed the following day. Copies of the waste manifest forms with weighmaster certificates are provided in Appendix A.

Prior to initiating backfilling activities, additional confirmatory grab soil samples were collected at areas that were over-excavated (sidewall samples 1523-SW8 through 1523-SW11 and basal samples 1523-BS7 and 1523-BS8) (Figure 5). All collected soil samples were processed and prepared for overnight delivery to Alpha Analytical of Sparks, NV for analyses under chain-of-custody. All collected samples with the exception of 1523-SW4, 1523-SW5, and 1523-SW6 were analyzed for TPH-D and TPH quantified as motor oil (MO). Fifty percent of the collected samples were analyzed for VOCs and twenty five percent for polynuclear aromatic hydrocarbons (PAHs). The soil samples identified for VOC and PAH analyses were selected based on field screenings measurements. Those soil samples collected on July 12, 2005 for VOC analysis using Encore samplers were frozen that night in order to increase the sample hold time. Two samples, 1523-BS8 and 1523-SW3, were selected for Synthetic Precipitation Leaching Procedure (SPLP), specifically for VOCs, based on preliminary results.

After all confirmatory soil samples were collected, a licensed soil engineer with Davis Earth Materials Inc. of San Diego, CA arrived on site to inspect the open excavation and approve it for backfilling. Backfilling activities consisted of using ¾-inch gravel to fill the excavation to 2 ft bgs which transpired most of the afternoon. After the excavation was backfilled, the open excavation was secured overnight using temporary fencing. A copy of the soils engineer field report is provided in Appendix A.

Site restoration activities were conducted from July 14-18, 2005. After the footprint of the excavation was surveyed using a hand-held Global Positioning System (GPS) unit (Trimble Geoexplorer® GeoXT™), filter fabric was laid on top of the gravel material and the remaining 2 ft of the excavation was backfilled in 6-inch lifts with the clean stockpiled soil and subsequently compacted. Once backfilling activities concluded, the soil engineer with Davis Earth Materials Inc. returned and conducted compaction tests at random locations within the backfilled footprint. After the backfilled area passed the compaction tests, the planter beds were reconstructed and the remaining area of the parking lot was repaved with asphalt and restriped. During the site restoration activities, the remainder of the stockpiled contaminated soil was transported to Candelaria Environmental on July 14-15, 2005 after waste manifests were signed. In addition, waste concrete and asphalt were transported to 3-Mile Pit, an on-base asphalt/concrete recycling facility. Copies of the soils engineer compaction report, soil waste manifest forms with weighmaster certificates, and survey plot for the excavation footprint are provided in Appendix A.

2.2 Analytical Results

Because the H&P Geochemistry laboratory data was used for field screening purposes only, split soil sample 1523-SW7-10 was also sent to Alpha Analytical with the other confirmation soil samples. Both analytical results from H&P Geochemistry and Alpha Analytical are posted on Table 1 and Figure 6.

All confirmatory grab soil samples with the exception of 1523-SW8 and 1523-SW10 reported detectable concentrations of petroleum hydrocarbons. Maximum concentrations of TPH-D were reported from basal samples and ranged from 310 mg/kg (1523-BS2) to 2,800 mg/kg (1523-BS8). TPH-D concentrations from sidewall samples ranged from non-detectable (1523-SW8 and 1523-SW10) to 2,300 mg/kg (1523-SW3 and 1523-SW11). TPH-MO ranged from non-detectable (1523-SW8, 1523-SW9, and 1523-SW10) to 660 mg/kg (1523-BS8). Minor detections of VOCs were reported in eight of the nine analyzed samples. The maximum VOC concentration reported from all samples was 0.38 mg/kg (1,2,4-TMB), which is below the U.S. EPA Region 9 Preliminary Remediation Goal (PRG) value of 52 mg/kg. The only BTEX compounds detected were ethylbenzene and total xylenes which were both only reported from sample 1523-SW3 at concentrations of 0.062 mg/kg and 0.051 mg/kg, respectively, and are below their corresponding PRG values. No PAHs were detected above their respective reporting limits.

SPLP results only indicated that 1,2,4-trimethylbenzene and naphthalene had the potential to leach to the subsurface. Naphthalene reported leachable concentrations from samples 1523-BS8 and 1523-SW3-10 at 18 µg/L and 19 µg/L, respectively, which are above the PRG value of 0.93 µg/L.

2.3 Electronic Data Submittal

In accordance with Assembly Bill (AB) 2886 (Water Code Sections 13195-13198), Battelle has completed electronic delivery format (EDF) uploads for the Site 1523 remedial action sampling via the Internet to the State of California Water Resources Control Board (SWRCB) GeoTracker System. These submissions included soil laboratory data.

Electronic data uploads included the following major activities:

1. Obtaining a unique Global Identification (ID) for each site.
2. Uploading a list of "Field_Point_Names" to GeoTracker.
3. Providing the Global ID and Field Point Names to the analytical laboratory on the chain of custody.
4. Ensuring that the field point names, Global ID, and all laboratory data were correct within each electronic submission file.
5. Submitting electronic compliance data via the GeoTracker Internet site.
6. Submitting an electronic copy of the pertinent report.

Because the H&P Geochemistry soil data was only used for field screening purposes, it is not formally being submitted and hence, will not be uploaded into GeoTracker. All Alpha Analytical data submittals for the 2005 remedial action soil sampling have been submitted to the GeoTracker Web site.

Section 3.0: Nature and Extent of Contamination

An initial volume estimate of approximately 741 yd³ of TPH-D-impacted soils at concentrations >1,000 mg/kg, which includes 631 yd³ of lesser contaminated overburden, was reported in the IRAP (Battelle, 2005). Based on the recent analytical results from the confirmatory grab soil samples collected during the July 12, 2005 remedial action, the nature and extent of TPH-D contamination at Site 1523 was revised and volume and mass estimates were recalculated (Table 2).

All available analytical data from soil samples collected at Site 1523 from tank removal, site assessment, and remedial action activities, were used to recalculate soil volume and mass estimates, which only changed slightly from the original values. A pre-excavation volume of TPH-D contaminated soils at concentrations >1,000 mg/kg was originally calculated to be 110 yd³ and revised to 107.5 yd³. Similarly, for concentrations >500 mg/kg, an original estimate of 168 yd³ was calculated and revised to 175 yd³. Mass estimate values were also revised and only changed slightly from what was calculated earlier. A mass of 610 lb was recalculated for TPH-D concentrations >1,000 mg/kg, a change from the earlier estimate of 630 lb. For concentrations >500 mg/kg, the recalculated mass of 730 lb of TPH-D was about the same as previously estimated (733 lb).

Post-excavation calculations have determined that approximately 97 yd³ of TPH-D contaminated soil at concentrations >1,000 mg/kg was excavated which accounts for a 90% by volume removal. Similarly, 131 yd³ of contaminated soils at concentrations >500 mg/kg was excavated which accounts for a 75% by volume removal. Currently, approximately 40 lb of TPH-D at concentrations >1,000 mg/kg remains in place at Site 1523, accounting for a 93% TPH-D mass removal. Similarly, approximately 99 lb of TPH-D at concentrations >500 mg/kg remains in place at Site 1523, accounting for 86% TPH-D mass removal. After soil volume and mass estimates were recalculated, three-dimensional (3-D) diagrams were generated with Earthvision[®] showing the extent of TPH-D contamination before and after excavation activities for concentrations >500 mg/kg and >1,000 mg/kg (Figures 8 and 9, respectively). A 3-D visualization of the current (post-excavation) extent of residual TPH-D-impacted soil depicts that the bulk of soil contamination at concentrations >1,000 mg/kg was removed, particularly in the lateral direction.

Section 4.0: Conclusions

Site 1523 is currently in the corrective action phase of site mitigation. Source zone removal of TPH-D contaminated soils was conducted at Site 1523 as outlined in the *Final Interim Remedial Action Plan for Site 1523, Marine Corps Base Camp Pendleton* (Battelle, 2005). The San Diego RWQCB approved the IRAP in July 2005 via email. Excavation activities were implemented soon afterwards in mid July 2005 and approximately 512 yd³ of material which includes TPH-D impacted soils was excavated.

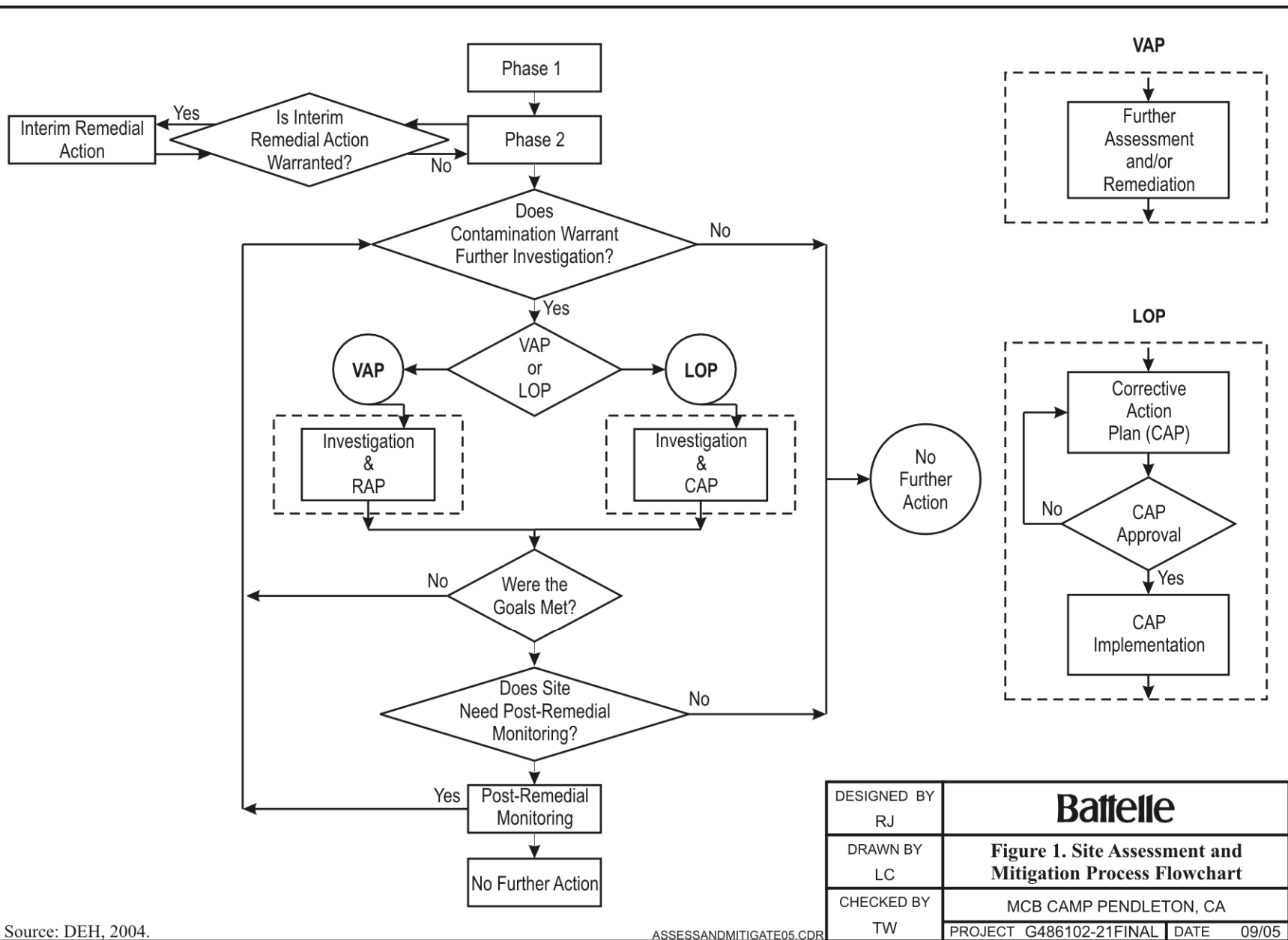
TPH-D impacted soil volume and mass estimates documented in the *Final IRAP for Site 1523* were accurate. Remedial action activities at Site 1523 were successful in executing the planned objective to remove the bulk of heavily contaminated soils. Approximately 90% volume of TPH-D contaminated soil at concentrations >1,000 mg/kg was removed, which corresponds to 93% TPH-D mass removed.

Additional groundwater monitoring well installation and monitoring was also part of the planned corrective action at the site following excavation activities. Additional wells are to be installed in September 2005 and continued groundwater monitoring will be conducted to capture the 4th quarter 2005 and 1st quarter 2006 sampling events.

Section 5.0: References

- Battelle. 2002. *Revised Final Corrective Action Plan for Site 1575 (Includes: Documentation of Interim Remedial Action Activities)*, Marine Corps Base Camp Pendleton. Prepared for Naval Facilities Engineering Command, San Diego, California. October.
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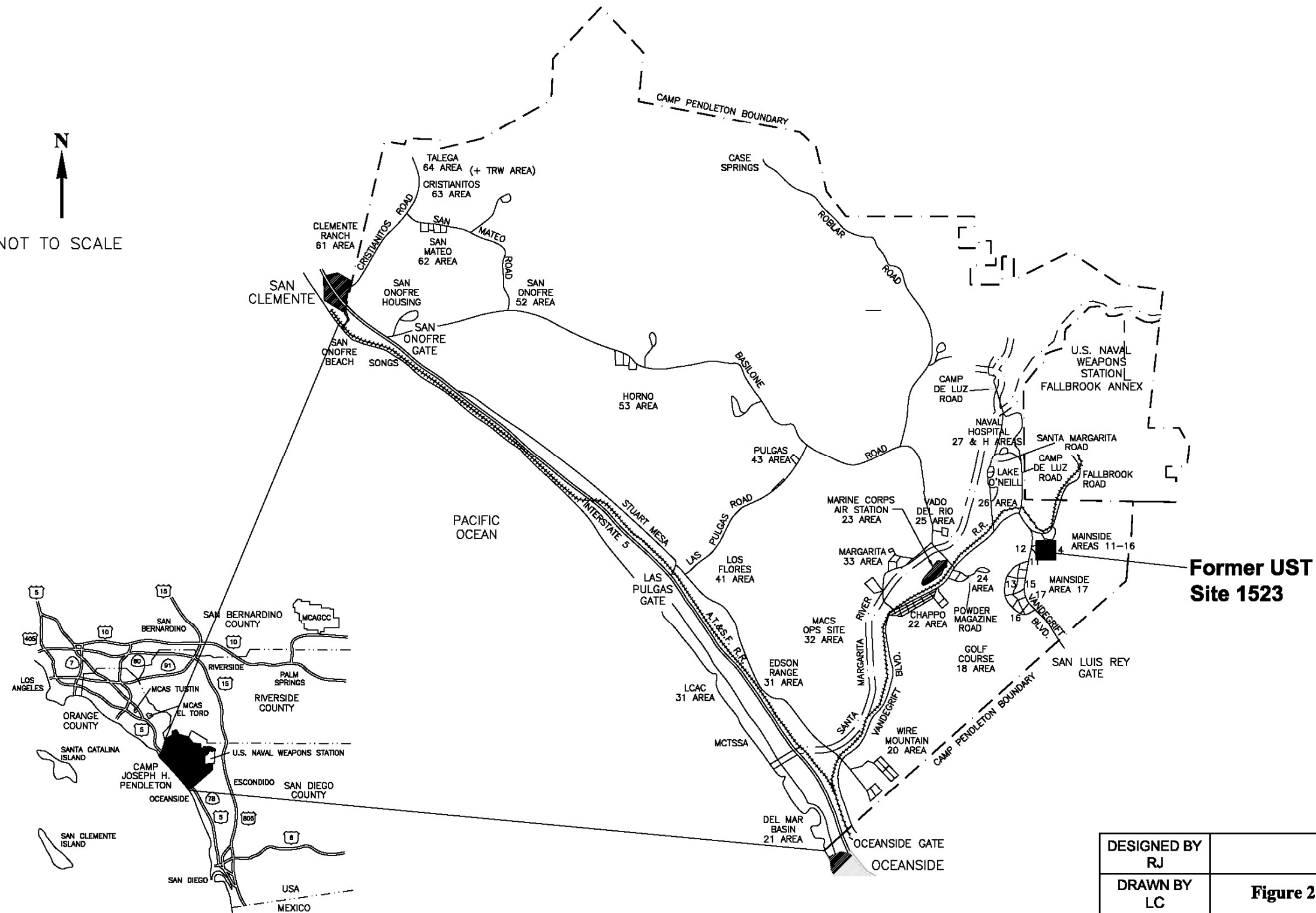
FIGURES



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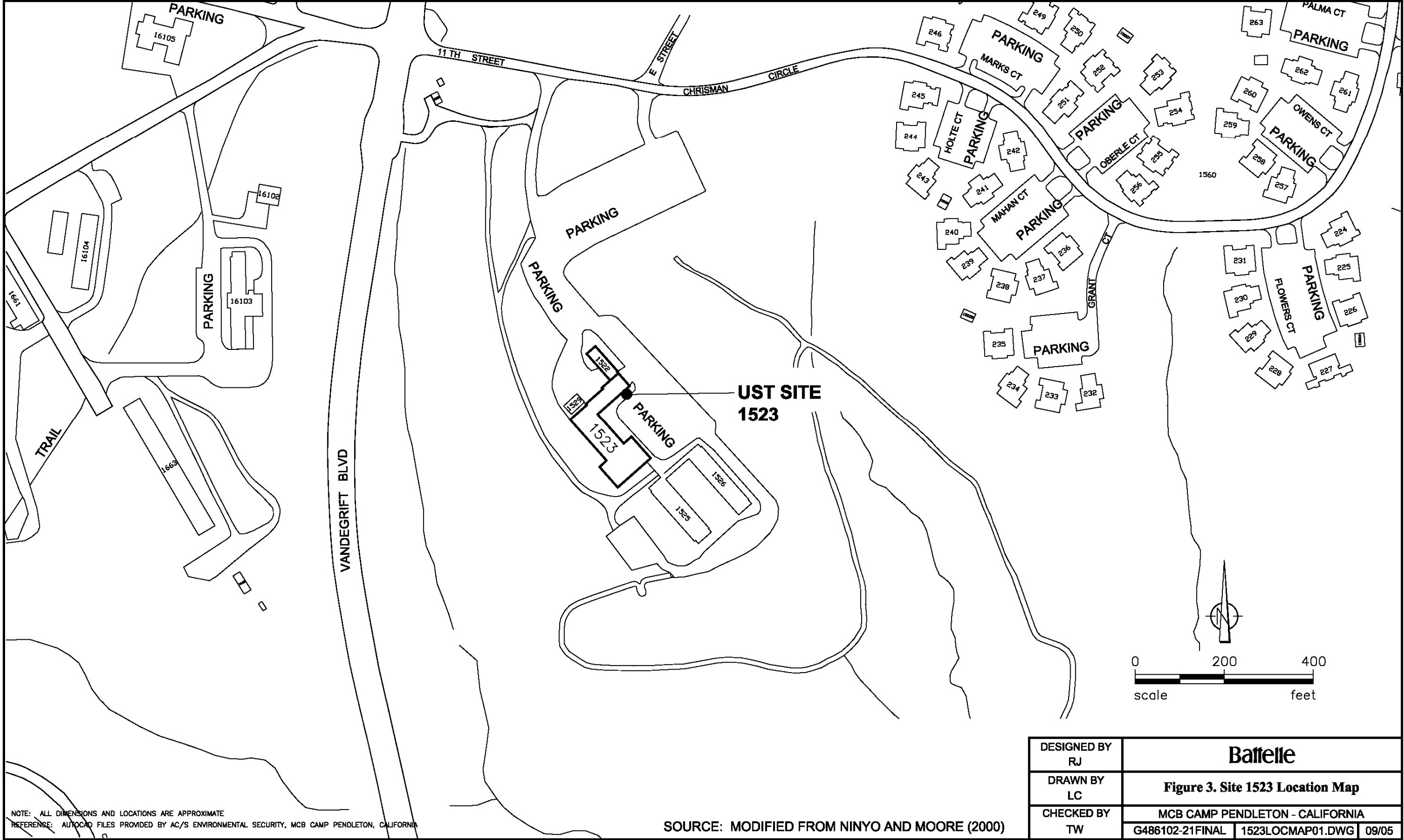
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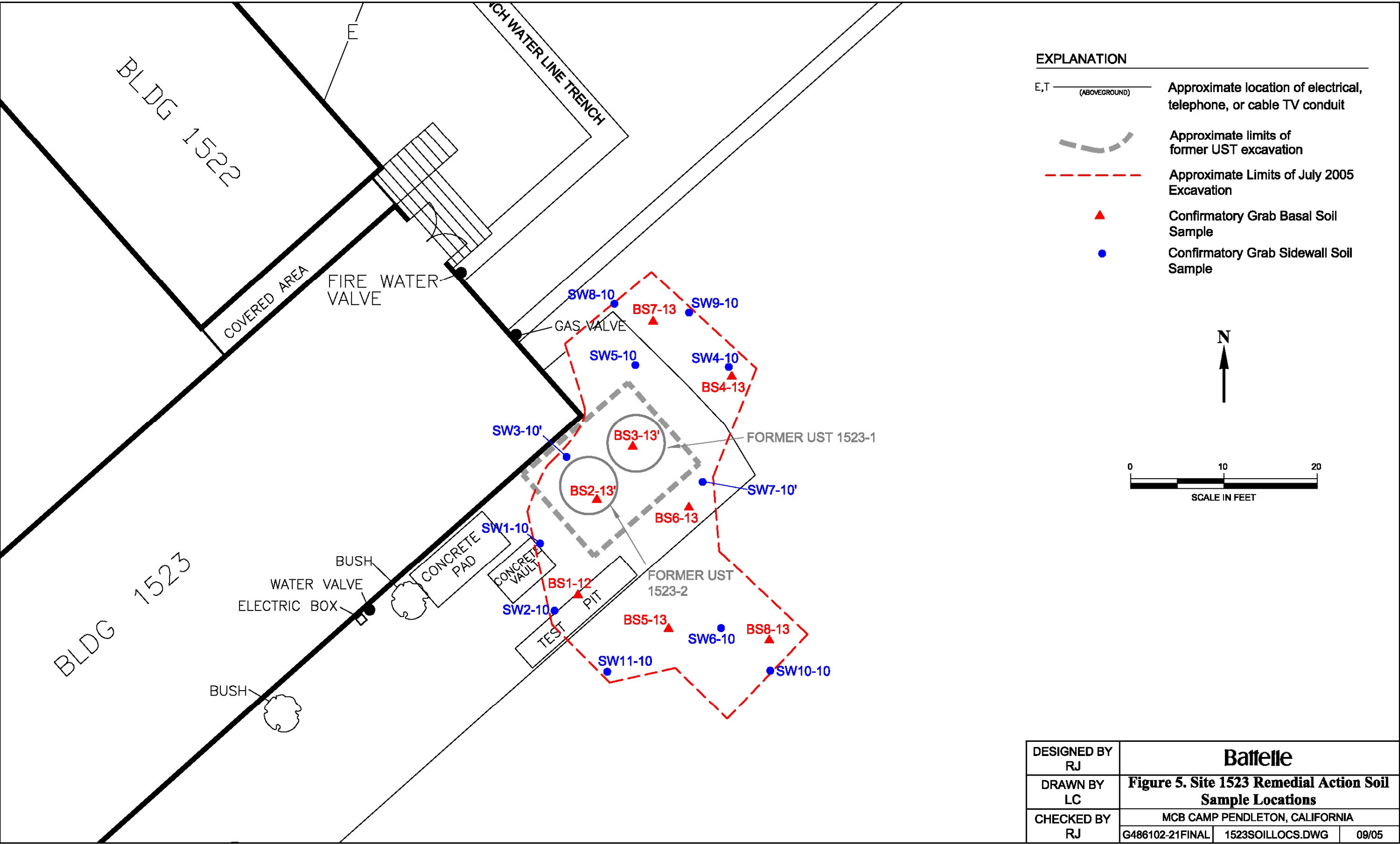
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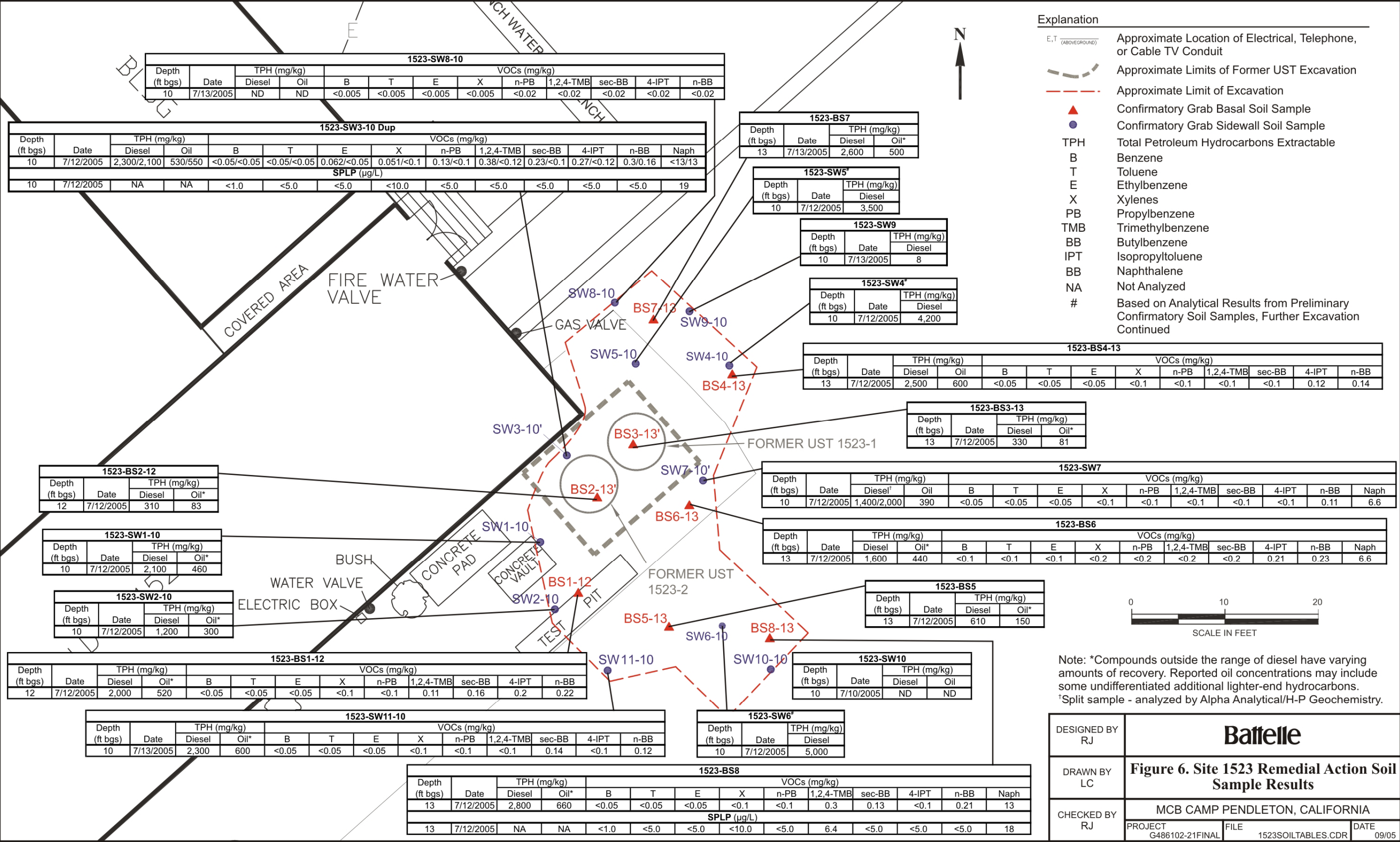


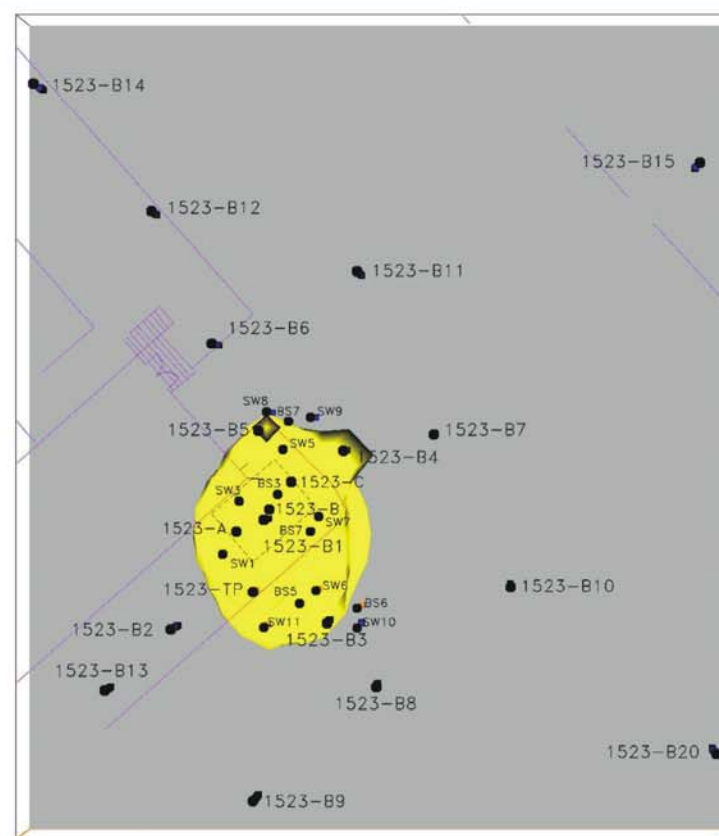
NOTE: MODIFIED FROM KLEINFELDER, REMOVAL OF UNDERGROUND STORAGE TANKS, CAMP JOSEPH H. PENDLETON, CAMP PENDLETON, CALIFORNIA
NAVFAC DWG. NO. 8029558 AND 8029553

DESIGNED BY RJ	Battelle		
DRAWN BY LC	Figure 2. Site 1523 Vicinity Map		
CHECKED BY MH	MCB CAMP PENDLETON, CALIFORNIA		
	G486102-21FINAL	FIGURE 1.DWG	09/05

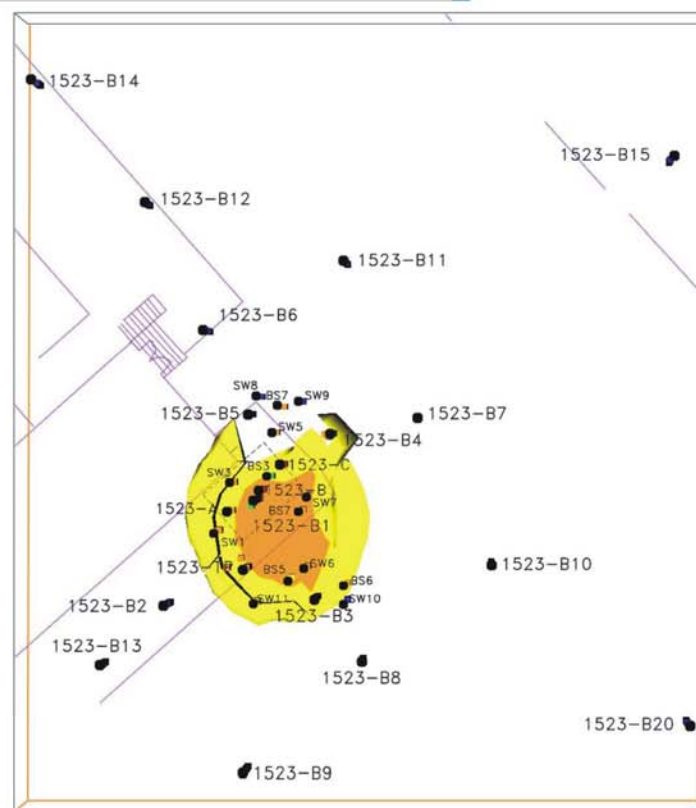
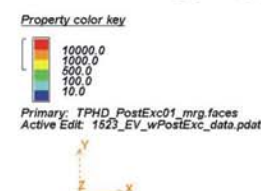




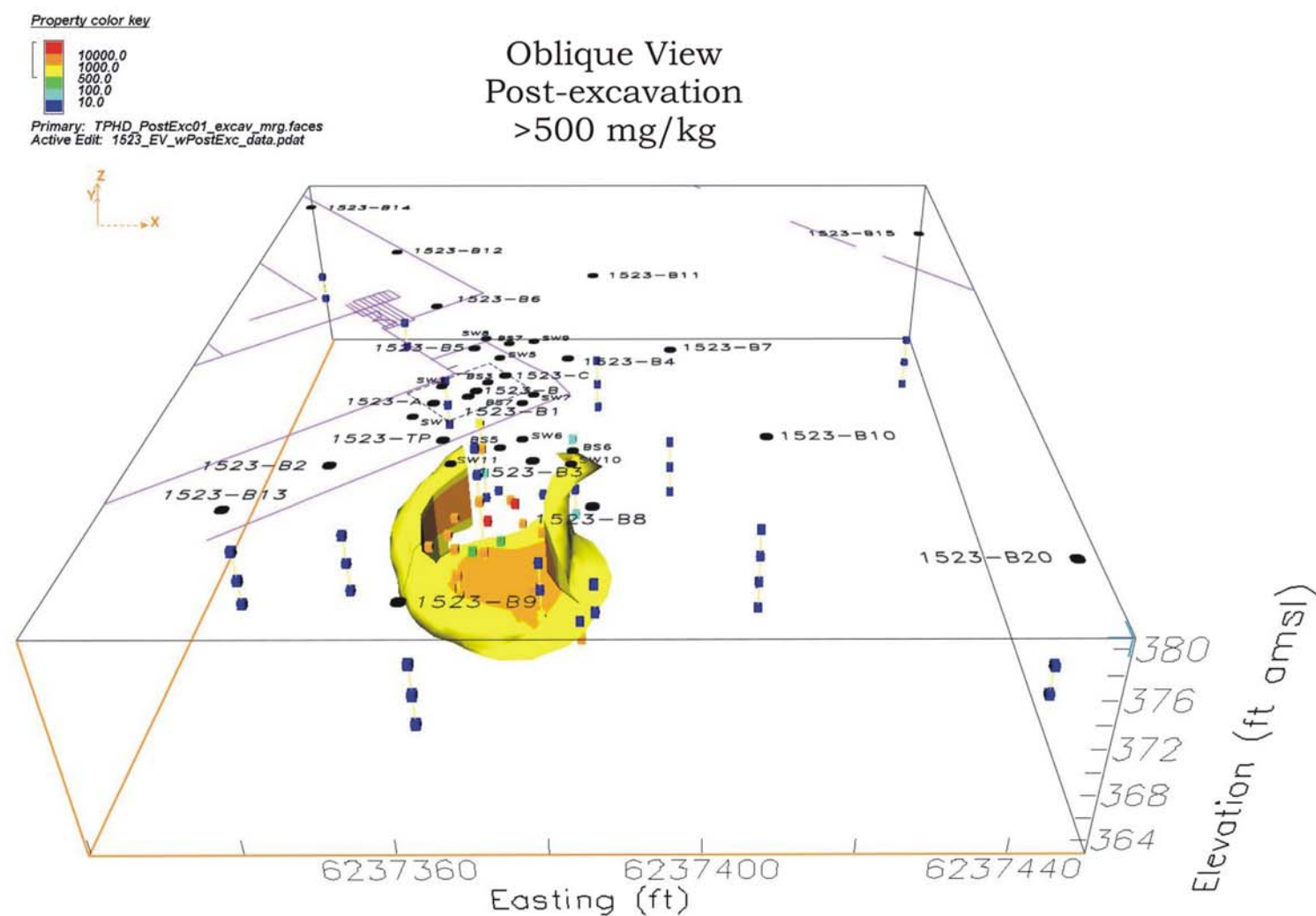
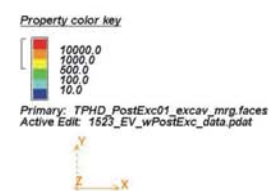




Plan View
Pre-excitation
>500 mg/kg



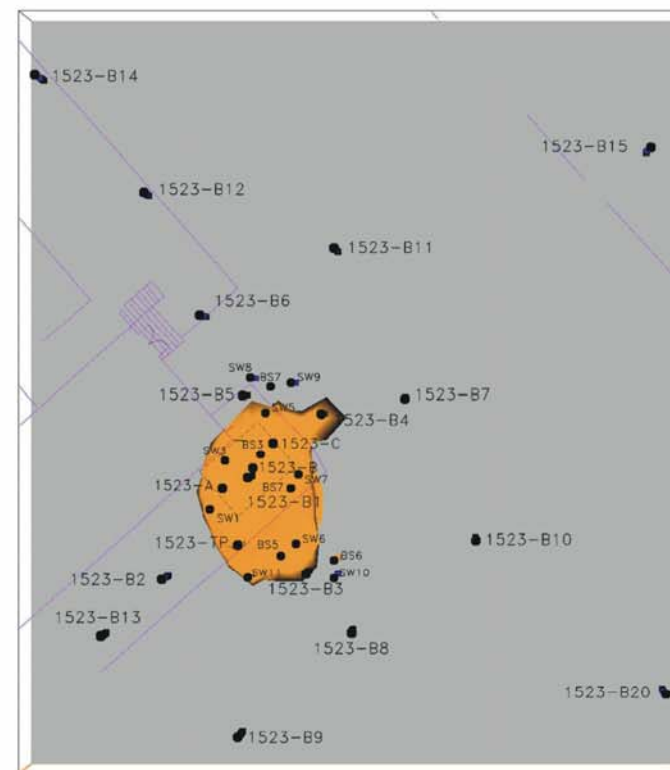
Plan View
Post-excitation
>500 mg/kg



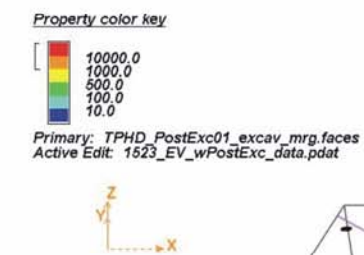
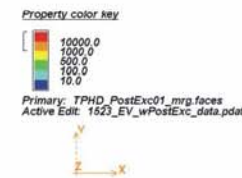
EXPLANATION

— Limits of excavation, Battelle, 2004

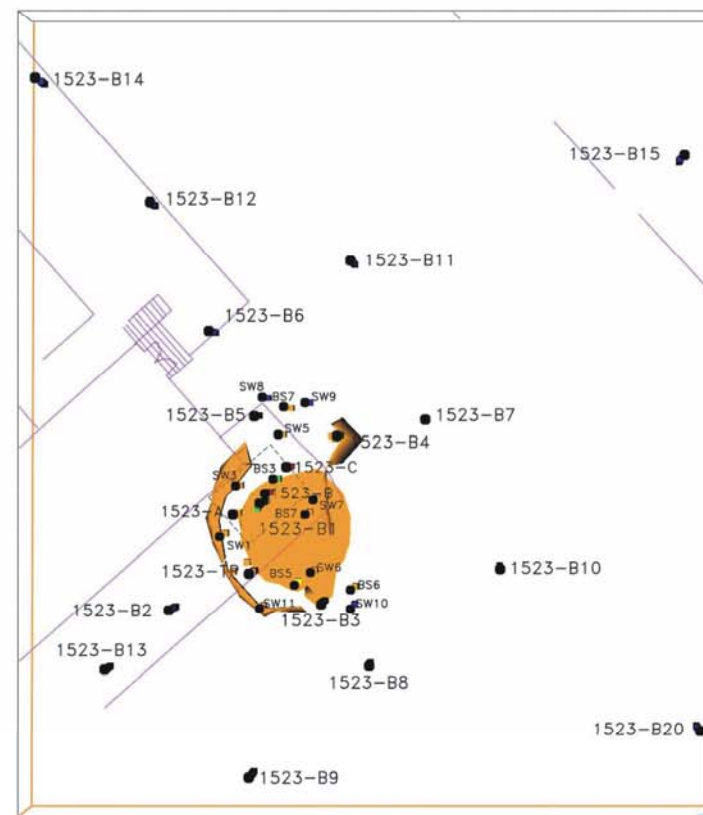
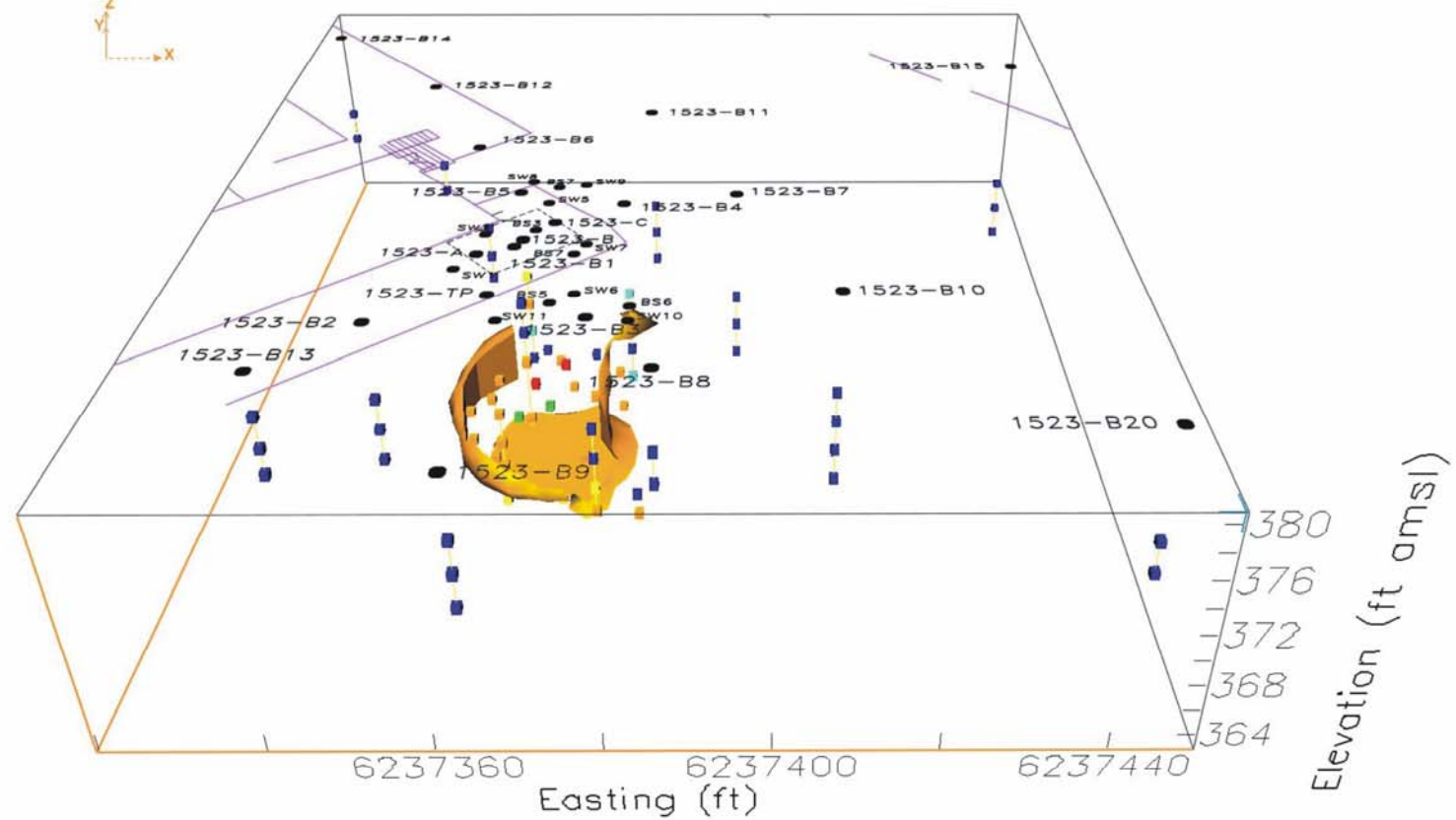
DESIGN BY JH	Battelle		
DRAWN BY RJ	Figure 7. Three-Dimensional Block Diagrams Showing the Extent of TPH Contamination in Soils at Concentrations >500 mg/kg at Site 1523		
CHECKED BY RJ	MCB CAMP PENDLETON, CALIFORNIA		
	PROJECT G486102-21FINAL	FILE 1523FIG8.CDR	DATE 09/05



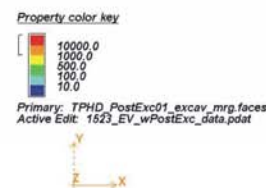
Plan View
Pre-excavation
>1,000 mg/kg



Oblique View
Post-excavation
>1,000 mg/kg



Plan View
Post-excavation
>1,000 mg/kg



EXPLANATION

— Limits of excavation, Battelle, 2004

DESIGN BY JH	Battelle		
DRAWN BY RJ	Figure 8. Three-Dimensional Block Diagrams Showing the Extent of TPH Contamination in Soils at Concentrations >1,000 mg/kg at Site 1523		
CHECKED BY RJ	MCB CAMP PENDLETON, CALIFORNIA		
	PROJECT G486102-21FINAL	FILE 1523FIG9.CDR	DATE 09/05

TABLES

Table 1. Soil Analytical Results from Remedial Action Activities at Site 1523

Sample Information			TPH Extractable (mg/kg)		VOCs (mg/kg)									
ID	Depth (ft bgs)	Date	Diesel	Oil *	Benzene	Toluene	Ethylbenzene	Total Xylenes	n-Propylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene
H&P Geochemistry Results														
1523-SW4	10	7/12/2005	4200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1523-SW5	10	7/12/2005	3500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1523-SW6	10	7/12/2005	5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1523-SW7	10	7/12/2005	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alpha Analytical Results														
1523-SW1-10	10	7/12/2005	2100	460	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1523-SW2-10	10	7/12/2005	1200	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1523-SW3-10	10	7/12/2005	2300	530	ND(0.05)	ND(0.05)	0.062	0.051	0.13	0.38	0.23	0.27	0.3	ND(13)
1523-SW3-10 DUP	10	7/12/2005	2100	550	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.1)	ND(0.1)	0.12	0.1	0.12	0.16	ND(13)
1523-SW7	10	7/12/2005	1400	390	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	0.11	ND(6.6)
1523-SW8-10	10	7/13/2005	ND	ND	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.01)	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	NA
1523-SW9	10	7/13/2005	7.8	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1523-SW10	10	7/13/2005	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1523-SW11-10	10	7/13/2005	2300	600	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.1)	ND(0.1)	ND(0.1)	0.14	ND(0.1)	0.12	NA
1523-BS1-12	12	7/12/2005	2000	520	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.1)	ND(0.1)	0.11	0.16	0.2	0.22	NA
1523-BS2-12	12	7/12/2005	310	83	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1523-BS3-13	13	7/12/2005	330	81	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1523-BS4-13	13	7/12/2005	2500	600	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	0.12	0.14	NA
1523-BS5	13	7/12/2005	610	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1523-BS6	13	7/12/2005	1600	440	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	0.21	0.23	ND(6.6)
1523-BS7	13	7/13/2005	2600	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1523-BS8	13	7/12/2005	2800	660	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.1)	ND(0.1)	0.3	0.13	0.1	0.21	ND(13)
SPLP (µg/L)														
1523-BS8	13	7/12/2005	NA	NA	ND(1.0)	ND(5.0)	ND(5.0)	ND(10.0)	ND(5.0)	6.4	ND(5.0)	ND(5.0)	ND(5.0)	18
1523-SW3-10	10	7/12/2005	NA	NA	ND(1.0)	ND(5.0)	ND(5.0)	ND(10.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	19

Note * Compounds outside the range of diesel have varying amounts of recovery. Reported oil concentrations may include some undifferentiated additional lighter-end hydrocarbons.

ND = Not Detected

NA = Not Analyzed

Table 2. Site 1523 TPH Contaminated Soil Volume and Total Mass Estimates

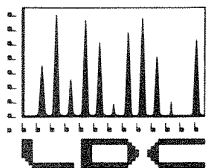
Shell #	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Concentration Used for Mass Calculation (mg/kg)	Grid Volume ^(a) (ft ³)	Contaminated Soil Volume (yds ³)	Contaminated Soil Mass ^(b) (lb)	TPH-D Mass ^(c) (lb)
Site 1523 Pre-Excavation (above bedrock)							
1	0	10	1.0	100,849.0	3735.1	8,815,622.0	8.82
2	10	100	55.0	27,198.0	1007.3	2,377,487.3	130.76
3	100	500	300.0	5,824.5	215.7	509,140.7	152.74
4	500	1,000	750.0	1,830.9	67.8	160,043.1	120.03
5	1,000	2,000	1,500.0	1,642.3	60.8	143,562.5	215.34
6	2,000	3,000	2,500.0	707.9	26.2	61,880.1	154.70
7	3,000	4,000	3,500.0	270.3	10.0	23,630.5	82.71
8	4,000	5,000	4,500.0	113.5	4.2	9,925.5	44.66
9	5,000	10,000	7,500.0	159.2	5.9	13,918.9	104.39
10	10,000	12,000	11,000.0	8.9	0.3	779.0	8.57
Total (>1,000 mg/kg)				10,557.6	107.5	253,696.6	610.38
Total				138,604.5	5133.5	26,715,757.6	1,022.73
Site 1523 - Amount Removed							
1	0	10	1.0	2,477.0	91.7	98,196.7	0.22
2	10	100	55.0	2,004.3	74.2	79,459.0	9.64
3	100	500	300.0	1,373.6	50.9	54,452.6	36.02
4	500	1,000	750.0	936.6	34.7	37,128.9	61.40
5	1,000	2,000	1,500.0	1,394.1	51.6	55,268.5	182.80
6	2,000	3,000	2,500.0	682.4	25.3	27,051.1	149.12
7	3,000	4,000	3,500.0	264.8	9.8	10,496.1	81.00
8	4,000	5,000	4,500.0	112.7	4.2	4,468.8	44.34
9	5,000	10,000	7,500.0	158.9	5.9	6,299.8	104.18
10	10,000	12,000	11,000.0	8.9	0.3	352.6	8.55
Total (>1,000 mg/kg)				4,931.9	97.1	103,936.9	570.00
Total				9,413.2	348.6	373,174.1	677.06

(a) Grid volume is from EarthVision™ Volumetrics Module calculation.

(b) Contaminated soil mass is determined from multiplying contaminated soil volume by the dry bulk density value of 1400 kg/m³.

(c) TPHD mass is determined from multiplying contaminated soil mass by the factor of one 1,000,000th (1/1M kg/mg) of average shell concentration.

APPENDIX A
DOCUMENTATION OF REMEDIAL ACTION ACTIVITIES



LABORATORY DATA CONSULTANTS, INC.

7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Battelle
505 King Ave
Columbus, OH 43201-2693
ATTN: Mr. Robert Janosy

September 12, 2005

SUBJECT: MCB Camp Pendleton, CTO 102, Data Validation

Dear Mr. Janosy,

Enclosed are the final validation reports for the fractions listed below. This SDG was received on August 24, 2005. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 13928:

<u>SDG #</u>	<u>Fraction</u>
BMI05071561	Volatiles, Polynuclear Aromatic Hydrocarbons, TPH as Extractables

The data validation was performed under EPA Level III and IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998

Please feel free to contact us if you have any questions.

Sincerely,

Erlinda T. Rauto
Operations Manager/Senior Chemist

LDC #13928 (Battelle-Columbus OH / MCB Camp Pendleton, CTO 102)

Shaded cells indicate Level IV validation (all other cells are Level III validation).

MCB Camp Pendleton, CTO 102
Data Validation Reports
LDC# 13928

Volatiles

LDC

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Camp Pendleton, CTO 102
Collection Date: July 12 through July 13, 2005
LDC Report Date: September 8, 2005
Matrix: Soil
Parameters: Volatiles
Validation Level: EPA Level III & IV
Laboratory: Alpha Analytical, Inc.

Sample Delivery Group (SDG): BMI05071561

Sample Identification

1523-SW3-10**
1523-SW3-10(SPLP)**
1523-SW3-10 Dup
1523-SW7
1523-SW8-10
1523-SW11-10
1523-BS1-12
1523-BS4-13
1523-BS6
1523-BS8**
1523-BS8(SPLP)**

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 11 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Total Days From Sample Collection Until Analysis	Required Holding Time From Sample Collection Until Analysis	Flag	A or P
1523-SW3-10** 1523-SW3-10 Dup 1523-SW7 1523-BS1-12 1523-BS4-13 1523-BS6 1523-BS8**	7 days	48 hours	J (all detects) UJ (all non-detects)	P
1523-SW8-10 1523-SW11-10	6 days	48 hours	J (all detects) UJ (all non-detects)	P

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
6/11/05	Bromodichloromethane	0.049 (≥ 0.05)	1523-SW3-10(SPLP)** 1523-BS8(SPLP)** MBLKMS10W0727A	J (all detects) UJ (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
7/27/05	Bromomethane 2,2-Dichloropropane 1,1,2,2-Tetrachloroethane	50.7 31.6 38.2	1523-SW3-10(SPLP)** 1523-BS8(SPLP)** MBLKMS10W0727A	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
7/27/05	Bromodichloromethane	0.040 (≥ 0.05)	1523-SW3-10(SPLP)** 1523-BS8(SPLP)** MBLKMS10W0727A	J (all detects) UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
1523-SW3-10(SPLP)** 1523-BS8(SPLP)** MBLKMS10W0727A	All TCL compounds	The LCS was analyzed as a continuing calibration standard.	The LCS should be analyzed independently from the calibration.	None	P

Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 1523-SW3-10** and 1523-SW3-10 Dup were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	1523-SW3-10**	1523-SW3-10 Dup	
Ethylbenzene	62	50U	200
o-Xylene	51	50U	200
n-Propylbenzene	130	100U	200
1,2,4-Trimethylbenzene	380	124	102
sec-Butylbenzene	230	100	79
p-Isopropyltoluene	270	120	77
n-Butylbenzene	300	160	61

XVII. Field Blanks

No field blanks were identified in this SDG.

Camp Pendleton, CTO 102
Volatiles - Data Qualification Summary - SDG BMI05071561

SDG	Sample	Compound	Flag	A or P	Reason
BMI05071561	1523-SW3-10** 1523-SW3-10 Dup 1523-SW7 1523-SW8-10 1523-SW11-10 1523-BS1-12 1523-BS4-13 1523-BS6 1523-BS8**	All TCL compounds	J (all detects) UJ (all non-detects)	P	Technical holding times
BMI05071561	1523-SW3-10(SPLP)** 1523-BS6(SPLP)**	Bromodichloromethane	J (all detects) UJ (all non-detects)	A	Initial calibration (RRF)
BMI05071561	1523-SW3-10(SPLP)** 1523-BS6(SPLP)**	Bromomethane 2,2-Dichloropropane 1,1,2,2-Tetrachloroethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
BMI05071561	1523-SW3-10(SPLP)** 1523-BS8(SPLP)**	Bromodichloromethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF)
BMI05071561	1523-SW3-10(SPLP)** 1523-BS8(SPLP)**	All TCL compounds	None	P	Laboratory control samples

Camp Pendleton, CTO 102
Volatiles - Laboratory Blank Data Qualification Summary - SDG BMI05071561

No Sample Data Qualified in this SDG



Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-01A
Client I.D. Number: 1523-SW3-10

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Compound	Concentration	Reporting Limit	Compound	Concentration	Reporting Limit
1 Dichlorodifluoromethane	ND <i>JS</i>	100 µg/Kg	36 m,p-Xylene	ND <i>JS</i>	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	51	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND <i>JS</i>	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	130	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND <i>JS</i>	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	380	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	230	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND <i>JS</i>	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND <i>JS</i>	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	270	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND <i>JS</i>	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	300	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND <i>JS</i>	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	1,300 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	93	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	98	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	96	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethene	ND	100 µg/Kg			
33 1,1,1,2-tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	62 <i>J</i>	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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7/21/05

Report Date

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Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-01A
Client I.D. Number: 1523-SW3-10

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/27/05

Volatile Organics by GC/MS EPA Method SW1312 / SW8260B

Compound	Concentration	Reporting Limit	Compound	Concentration	Reporting Limit
1 Dichlorodifluoromethane	ND	5.0 µg/L	36 m,p-Xylene	ND	5.0 µg/L
2 Chloromethane	ND	10 µg/L	37 Bromoform	ND	5.0 µg/L
3 Vinyl chloride	ND	5.0 µg/L	38 Styrene	ND	5.0 µg/L
4 Chloroethane	ND	5.0 µg/L	39 o-Xylene	ND	5.0 µg/L
5 Bromomethane	ND	2.0 µg/L	40 1,1,2,2-Tetrachloroethane	ND	5.0 µg/L
6 Trichlorofluoromethane	ND	5.0 µg/L	41 1,2,3-Trichloropropane	ND	10 µg/L
7 1,1-Dichloroethene	ND	5.0 µg/L	42 Isopropylbenzene	ND	5.0 µg/L
8 Dichloromethane	ND	5.0 µg/L	43 Bromobenzene	ND	5.0 µg/L
9 trans-1,2-Dichloroethene	ND	5.0 µg/L	44 n-Propylbenzene	ND	5.0 µg/L
10 1,1-Dichloroethane	ND	5.0 µg/L	45 4-Chlorotoluene	ND	5.0 µg/L
11 2-Butanone (MEK)	ND	20 µg/L	46 2-Chlorotoluene	ND	5.0 µg/L
12 cis-1,2-Dichloroethene	ND	5.0 µg/L	47 1,3,5-Trimethylbenzene	ND	5.0 µg/L
13 Bromochloromethane	ND	5.0 µg/L	48 tert-Butylbenzene	ND	5.0 µg/L
14 Chloroform	ND	5.0 µg/L	49 1,2,4-Trimethylbenzene	ND	5.0 µg/L
15 2,2-Dichloropropane	ND	5.0 µg/L	50 sec-Butylbenzene	ND	5.0 µg/L
16 1,2-Dichloroethane	ND	5.0 µg/L	51 1,3-Dichlorobenzene	ND	5.0 µg/L
17 1,1,1-Trichloroethane	ND	5.0 µg/L	52 1,4-Dichlorobenzene	ND	5.0 µg/L
18 1,1-Dichloropropene	ND	5.0 µg/L	53 4-Isopropyltoluene	ND	5.0 µg/L
19 Carbon tetrachloride	ND	5.0 µg/L	54 1,2-Dichlorobenzene	ND	5.0 µg/L
20 Benzene	ND	1.0 µg/L	55 n-Butylbenzene	ND	5.0 µg/L
21 Dibromomethane	ND	5.0 µg/L	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0 µg/L
22 1,2-Dichloropropane	ND	5.0 µg/L	57 1,2,4-Trichlorobenzene	ND	10 µg/L
23 Trichloroethene	ND	5.0 µg/L	58 Naphthalene	19	10 µg/L
24 Bromodichloromethane	ND	5.0 µg/L	59 Hexachlorobutadiene	ND	10 µg/L
25 cis-1,3-Dichloropropene	ND	5.0 µg/L	60 1,2,3-Trichlorobenzene	ND	10 µg/L
26 trans-1,3-Dichloropropene	ND	5.0 µg/L	61 Surr: 1,2-Dichloroethane-d4	88	%REC
27 1,1,2-Trichloroethane	ND	5.0 µg/L	62 Surr: Toluene-d8	99	%REC
28 Toluene	ND	5.0 µg/L	63 Surr: 4-Bromofluorobenzene	92	%REC
29 1,3-Dichloropropane	ND	5.0 µg/L			
30 Dibromochloromethane	ND	5.0 µg/L			
31 1,2-Dibromoethane (EDB)	ND	10 µg/L			
32 Tetrachloroethene	ND	5.0 µg/L			
33 1,1,1,2-Tetrachloroethane	ND	5.0 µg/L			
34 Chlorobenzene	ND	5.0 µg/L			
35 Ethylbenzene	ND	5.0 µg/L			

This analysis was performed on an SPLP extract.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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RJ
7/28/05

Report Date

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Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-02A
Client I.D. Number: 1523-SW3-10 DUP

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Compound	Concentration	Reporting Limit	Compound	Concentration	Reporting Limit
1 Dichlorodifluoromethane	ND <i>uJ</i>	100 µg/Kg	36 m,p-Xylene	ND <i>uJ</i>	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	ND	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	ND	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	120 <i>uJ</i>	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	100 <i>uJ</i>	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND <i>uJ</i>	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND <i>uJ</i>	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	120 <i>uJ</i>	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND <i>uJ</i>	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	160 <i>uJ</i>	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND <i>uJ</i>	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	900 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	94	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	95	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	95	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethene	ND	100 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	ND	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-03A
Client I.D. Number: 1523-SW7

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Compound	Concentration	Reporting Limit	Compound	Concentration	Reporting Limit
1 Dichlorodifluoromethane	ND <i>WJ</i>	100 µg/Kg	36 m,p-Xylene	ND <i>WJ</i>	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	ND	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	ND	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	ND	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	ND	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	ND	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	110 <i>WJ</i>	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND <i>WJ</i>	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	700 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	93	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	95	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	98	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethene	ND	100 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	ND <i>WJ</i>	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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Report Date

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Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-04A
Client I.D. Number: 1523-SW8-10

Sampled: 07/13/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Compound	Concentration	Reporting Limit	Compound	Concentration	Reporting Limit
1 Dichlorodifluoromethane	ND	20 µg/Kg	36 m,p-Xylene	ND	5.0 µg/Kg
2 Chloromethane	ND	40 µg/Kg	37 Bromoform	ND	20 µg/Kg
3 Vinyl chloride	ND	20 µg/Kg	38 Styrene	ND	20 µg/Kg
4 Chloroethane	ND	20 µg/Kg	39 o-Xylene	ND	5.0 µg/Kg
5 Bromomethane	ND	40 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6 Trichlorofluoromethane	ND	20 µg/Kg	41 1,2,3-Trichloropropane	ND	40 µg/Kg
7 1,1-Dichloroethene	ND	20 µg/Kg	42 Isopropylbenzene	ND	20 µg/Kg
8 Dichloromethane	ND	40 µg/Kg	43 Bromobenzene	ND	20 µg/Kg
9 trans-1,2-Dichloroethene	ND	20 µg/Kg	44 n-Propylbenzene	ND	20 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	5.0 µg/Kg	45 4-Chlorotoluene	ND	20 µg/Kg
11 1,1-Dichloroethane	ND	20 µg/Kg	46 2-Chlorotoluene	ND	20 µg/Kg
12 cis-1,2-Dichloroethene	ND	20 µg/Kg	47 1,3,5-Trimethylbenzene	ND	20 µg/Kg
13 Bromochloromethane	ND	20 µg/Kg	48 tert-Butylbenzene	ND	20 µg/Kg
14 Chloroform	ND	20 µg/Kg	49 1,2,4-Trimethylbenzene	ND	20 µg/Kg
15 2,2-Dichloropropane	ND	20 µg/Kg	50 sec-Butylbenzene	ND	20 µg/Kg
16 1,2-Dichloroethane	ND	20 µg/Kg	51 1,3-Dichlorobenzene	ND	20 µg/Kg
17 1,1,1-Trichloroethane	ND	20 µg/Kg	52 1,4-Dichlorobenzene	ND	20 µg/Kg
18 1,1-Dichloropropene	ND	20 µg/Kg	53 4-Isopropyltoluene	ND	20 µg/Kg
19 Carbon tetrachloride	ND	20 µg/Kg	54 1,2-Dichlorobenzene	ND	20 µg/Kg
20 Benzene	ND	5.0 µg/Kg	55 n-Butylbenzene	ND	20 µg/Kg
21 Dibromomethane	ND	20 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	100 µg/Kg
22 1,2-Dichloropropane	ND	20 µg/Kg	57 1,2,4-Trichlorobenzene	ND	40 µg/Kg
23 Trichloroethene	ND	20 µg/Kg	58 Naphthalene	ND	40 µg/Kg
24 Bromodichloromethane	ND	20 µg/Kg	59 Hexachlorobutadiene	ND	40 µg/Kg
25 cis-1,3-Dichloropropene	ND	20 µg/Kg	60 1,2,3-Trichlorobenzene	ND	40 µg/Kg
26 trans-1,3-Dichloropropene	ND	20 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	94	%REC
27 1,1,2-Trichloroethane	ND	20 µg/Kg	62 Surr: Toluene-d8	96	%REC
28 Toluene	ND	5.0 µg/Kg	63 Surr: 4-Bromofluorobenzene	91	%REC
29 1,3-Dichloropropane	ND	20 µg/Kg			
30 Dibromochloromethane	ND	20 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	40 µg/Kg			
32 Tetrachloroethene	ND	20 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	20 µg/Kg			
34 Chlorobenzene	ND	20 µg/Kg			
35 Ethylbenzene	ND	5.0 µg/Kg			

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 2 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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Report Date

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Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-05A
Client I.D. Number: 1523-SW11-10

Sampled: 07/13/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Compound	Concentration	Reporting Limit	Compound	Concentration	Reporting Limit
1 Dichlorodifluoromethane	ND	100 µg/Kg	36 m,p-Xylene	ND	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	ND	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	ND	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	ND	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	140	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	ND	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	120	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	400 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	92	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	95	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	96	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethene	ND	100 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	ND	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was received and extracted within holding time.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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9/9/05



Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-06A
Client I.D. Number: 1523-BS1-12

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Compound	Concentration	Reporting Limit	Compound	Concentration	Reporting Limit
1 Dichlorodifluoromethane	ND	100 µg/Kg	36 m,p-Xylene	ND	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	ND	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	ND	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	110	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	160	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	200	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	220	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	1,100 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	92	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	96	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	96	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethane	ND	100 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	ND	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 4 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

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9/29/05



Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-07A
Client I.D. Number: 1523-BS4-13

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Compound	Concentration	Reporting Limit	Compound	Concentration	Reporting Limit
1 Dichlorodifluoromethane	ND <i>US</i>	100 µg/Kg	36 m,p-Xylene	ND <i>US</i>	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	ND	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	ND	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	ND	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	ND	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	120 <i>US</i>	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND <i>US</i>	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	140 <i>US</i>	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND <i>US</i>	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	800 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	91	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	96	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	97	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethene	ND	100 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	ND	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl *Randy Gardner* *Walter Hinchman*
Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-08A
Client I.D. Number: 1523-BS6

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Reporting			Reporting		
Compound	Concentration	Limit	Compound	Concentration	Limit
1 Dichlorodifluoromethane	ND <i>US</i>	200 µg/Kg	36 m,p-Xylene	ND <i>US</i>	100 µg/Kg
2 Chloromethane	ND	400 µg/Kg	37 Bromoform	ND	200 µg/Kg
3 Vinyl chloride	ND	200 µg/Kg	38 Styrene	ND	200 µg/Kg
4 Chloroethane	ND	200 µg/Kg	39 o-Xylene	ND	100 µg/Kg
5 Bromomethane	ND	800 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	200 µg/Kg
6 Trichlorofluoromethane	ND	200 µg/Kg	41 1,2,3-Trichloropropane	ND	800 µg/Kg
7 1,1-Dichloroethene	ND	200 µg/Kg	42 Isopropylbenzene	ND	200 µg/Kg
8 Dichloromethane	ND	800 µg/Kg	43 Bromobenzene	ND	200 µg/Kg
9 trans-1,2-Dichloroethene	ND	200 µg/Kg	44 n-Propylbenzene	ND	200 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	100 µg/Kg	45 4-Chlorotoluene	ND	200 µg/Kg
11 1,1-Dichloroethane	ND	200 µg/Kg	46 2-Chlorotoluene	ND	200 µg/Kg
12 cis-1,2-Dichloroethene	ND	200 µg/Kg	47 1,3,5-Trimethylbenzene	ND	200 µg/Kg
13 Bromochloromethane	ND	200 µg/Kg	48 tert-Butylbenzene	ND	200 µg/Kg
14 Chloroform	ND	200 µg/Kg	49 1,2,4-Trimethylbenzene	ND	200 µg/Kg
15 2,2-Dichloropropane	ND	200 µg/Kg	50 sec-Butylbenzene	ND	200 µg/Kg
16 1,2-Dichloroethane	ND	200 µg/Kg	51 1,3-Dichlorobenzene	ND	200 µg/Kg
17 1,1,1-Trichloroethane	ND	200 µg/Kg	52 1,4-Dichlorobenzene	ND	200 µg/Kg
18 1,1-Dichloropropene	ND	200 µg/Kg	53 4-Isopropyltoluene	210	200 µg/Kg
19 Carbon tetrachloride	ND	200 µg/Kg	54 1,2-Dichlorobenzene	ND	200 µg/Kg
20 Benzene	ND	100 µg/Kg	55 n-Butylbenzene	230	200 µg/Kg
21 Dibromomethane	ND	200 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	1,200 µg/Kg
22 1,2-Dichloropropane	ND	200 µg/Kg	57 1,2,4-Trichlorobenzene	ND	800 µg/Kg
23 Trichloroethene	ND	200 µg/Kg	58 Naphthalene	ND	800 µg/Kg
24 Bromodichloromethane	ND	200 µg/Kg	59 Hexachlorobutadiene	ND	800 µg/Kg
25 cis-1,3-Dichloropropene	ND	200 µg/Kg	60 1,2,3-Trichlorobenzene	ND	800 µg/Kg
26 trans-1,3-Dichloropropene	ND	200 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	92	%REC
27 1,1,2-Trichloroethane	ND	200 µg/Kg	62 Surr: Toluene-d8	95	%REC
28 Toluene	ND	100 µg/Kg	63 Surr: 4-Bromofluorobenzene	97	%REC
29 1,3-Dichloropropane	ND	200 µg/Kg			
30 Dibromochloromethane	ND	200 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	800 µg/Kg			
32 Tetrachloroethene	ND	200 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	200 µg/Kg			
34 Chlorobenzene	ND	200 µg/Kg			
35 Ethylbenzene	ND	100 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

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Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-09A
Client I.D. Number: 1523-BS8

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Compound	Concentration	Reporting Limit	Compound	Concentration	Reporting Limit
1 Dichlorodifluoromethane	ND	100 µg/Kg	36 m,p-Xylene	ND	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	ND	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	ND	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	300	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	130	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	100	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	210	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	1,000 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	92	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	95	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	95	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethene	ND	100 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	ND	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Schell

Randy Gardner

Walter Hinehman

Roger L. Schell, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinehman, Quality Assurance Officer
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7/21/05



Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-09A
Client I.D. Number: 1523-BS8

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/27/05

Volatile Organics by GC/MS EPA Method SW1312 / SW8260B

Compound	Concentration	Reporting Limit	Compound	Concentration	Reporting Limit
1 Dichlorodifluoromethane	ND	5.0 µg/L	36 m,p-Xylene	ND	5.0 µg/L
2 Chloromethane	ND	10 µg/L	37 Bromoform	ND	5.0 µg/L
3 Vinyl chloride	ND	5.0 µg/L	38 Styrene	ND	5.0 µg/L
4 Chloroethane	ND	5.0 µg/L	39 o-Xylene	ND	5.0 µg/L
5 Bromomethane	ND	2.0 µg/L	40 1,1,2,2-Tetrachloroethane	ND	5.0 µg/L
6 Trichlorofluoromethane	ND	5.0 µg/L	41 1,2,3-Trichloropropane	ND	10 µg/L
7 1,1-Dichloroethene	ND	5.0 µg/L	42 Isopropylbenzene	ND	5.0 µg/L
8 Dichloromethane	ND	50 µg/L	43 Bromobenzene	ND	5.0 µg/L
9 trans-1,2-Dichloroethene	ND	5.0 µg/L	44 n-Propylbenzene	ND	5.0 µg/L
10 1,1-Dichloroethane	ND	5.0 µg/L	45 4-Chlorotoluene	ND	5.0 µg/L
11 2-Butanone (MEK)	ND	20 µg/L	46 2-Chlorotoluene	ND	5.0 µg/L
12 cis-1,2-Dichloroethene	ND	5.0 µg/L	47 1,3,5-Trimethylbenzene	ND	5.0 µg/L
13 Bromochloromethane	ND	5.0 µg/L	48 tert-Butylbenzene	ND	5.0 µg/L
14 Chloroform	ND	5.0 µg/L	49 1,2,4-Trimethylbenzene	6.4	5.0 µg/L
15 2,2-Dichloropropane	ND	5.0 µg/L	50 sec-Butylbenzene	ND	5.0 µg/L
16 1,2-Dichloroethane	ND	5.0 µg/L	51 1,3-Dichlorobenzene	ND	5.0 µg/L
17 1,1,1-Trichloroethane	ND	5.0 µg/L	52 1,4-Dichlorobenzene	ND	5.0 µg/L
18 1,1-Dichloropropene	ND	5.0 µg/L	53 4-Isopropyltoluene	ND	5.0 µg/L
19 Carbon tetrachloride	ND	5.0 µg/L	54 1,2-Dichlorobenzene	ND	5.0 µg/L
20 Benzene	ND	1.0 µg/L	55 n-Butylbenzene	ND	5.0 µg/L
21 Dibromomethane	ND	5.0 µg/L	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0 µg/L
22 1,2-Dichloropropane	ND	5.0 µg/L	57 1,2,4-Trichlorobenzene	ND	10 µg/L
23 Trichloroethene	ND	5.0 µg/L	58 Naphthalene	18	10 µg/L
24 Bromodichloromethane	ND	5.0 µg/L	59 Hexachlorobutadiene	ND	10 µg/L
25 cis-1,3-Dichloropropene	ND	5.0 µg/L	60 1,2,3-Trichlorobenzene	ND	10 µg/L
26 trans-1,3-Dichloropropene	ND	5.0 µg/L	61 Surr: 1,2-Dichloroethane-d4	94	%REC
27 1,1,2-Trichloroethane	ND	5.0 µg/L	62 Surr: Toluene-d8	103	%REC
28 Toluene	ND	5.0 µg/L	63 Surr: 4-Bromofluorobenzene	91	%REC
29 1,3-Dichloropropane	ND	5.0 µg/L			
30 Dibromochloromethane	ND	5.0 µg/L			
31 1,2-Dibromoethane (EDB)	ND	10 µg/L			
32 Tetrachloroethene	ND	5.0 µg/L			
33 1,1,1,2-Tetrachloroethane	ND	5.0 µg/L			
34 Chlorobenzene	ND	5.0 µg/L			
35 Ethylbenzene	ND	5.0 µg/L			

This analysis was performed on an SPLP extract.

ND = Not Detected

Roger L. Scholl

Randy Gardner

Walter Hinchman

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7/28/05

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LDC #: 13928A1

VALIDATION COMPLETENESS WORKSHEET

Date: 9/05/05

SDG #: BMI05071561

Level III/IV

Page: 1 of 1

Laboratory: Alpha Analytical, Inc.

Reviewer: SV6

2nd Reviewer: *[Signature]*

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	SW	Sampling dates: 7/12-13/05
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	% RSD, r^2
IV.	Continuing calibration	SW	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client specified
VIII.	Laboratory control samples	SW	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	Not reviewed for Level III validation.
XII.	Compound quantitation/CRQLs	A	Not reviewed for Level III validation.
XIII.	Tentatively identified compounds (TICs)	N	Not reviewed for Level III validation.
XIV.	System performance	A	Not reviewed for Level III validation.
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 1, 3
XVII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected D = Duplicate
R = Rinsate TB = Trip blank
FB = Field blank EB = Equipment blank

Validated Samples: ** Indicates sample underwent Level IV validation

1	1523-SW3-10**	D	11	1523-BS8(SPLP)**	21	1	MBLK MS10W0727A	31	
2	1523-SW3-10(SPLP)**		12		22	✓	MBLK MS07S2654A	32	
3	1523-SW3-10 Dup	D	13		23			33	
4	1523-SW7		14		24			34	
5	1523-SW8-10		15		25			35	
6	1523-SW11-10		16		26			36	
7	1523-BS1-12		17		27			37	
8	1523-BS4-13		18		28			38	
9	1523-BS6		19		29			39	
10	1523-BS8**		20		30			40	

LDC #: 13928A1
SDG #: BME05 07 154

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: JG
2nd Reviewer: J

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples analyzed within the 12 hour clock criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria of > 0.990 ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) $\leq 30\%$ and relative response factors (RRF) > 0.05 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq 25\%$ and relative response factors (RRF) ≥ 0.05 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
V. Blanks				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

LDC #: 13928A1
SDG #: DME05071541

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: JN
2nd Reviewer: 4

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	was CCV to LCS (2,11)
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were the performance evaluation (PE) samples within the acceptance limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were retention times within + 30 seconds of the associated calibration standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XI. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were chromatogram peaks verified and accounted for?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Were relative intensities of the major ions within \pm 20% between the sample and the reference spectra?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
XIV. System performance				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field duplicates.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XVII. Field blanks				
Field blanks were identified in this SDG.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field blanks.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	S. Trichloroethane	KK. Trichlorofluoromethane	CCC. tert-Butylbenzene	UUU. 1,2-Dichlorotetrafluoroethane
B. Bromomethane	T. Dibromochloromethane	LL. Methyl-tert-butyl ether	DDD. 1,2,4-Trimethylbenzene	VVV. 4-Ethyltoluene
C. Vinyl chloride**	U. 1,1,2-Trichloroethane	MM. 1,2-Dibromo-3-chloropropane	EEE. sec-Butylbenzene	WWW. Ethanol
D. Chloroethane	V. Benzene	NN. Methyl ethyl ketone	FFF. 1,3-Dichlorobenzene	XXX. Di-Isopropyl ether
E. Methylene chloride	W. trans-1,3-Dichloropropane	OO. 2,2-Dichloropropane	GGG. p-Isopropyltoluene	YYY. tert-Butanol
F. Acetone	X. Bromoform*	PP. Bromochloromethane	HHH. 1,4-Dichlorobenzene	ZZZ. tert-Butyl alcohol
G. Carbon disulfide	Y. 4-Methyl-2-pentanone	QQ. 1,1-Dichloropropane	III. n-Butylbenzene	AAAA. Ethyl tert-butyl ether
H. 1,1,1-Dichloroethane**	Z. 2-Hexanone	RR. Dibromomethane	JJJ. 1,2-Dichlorobenzene	BBBB. tert-Amyl methyl ether
I. 1,1-Dichloroethane*	AA. Tetrachloroethane	SS. 1,3-Dichloropropane	KKK. 1,2,4-Trichlorobenzene	CCCC. 1-Chlorohexane
J. 1,2-Dichloroethane, total	BB. 1,1,2,2-Tetrachloroethane*	TT. 1,2-Dibromomethane	LLL. Hexachlorobutadiene	DDDD. Isopropyl alcohol
K. Chloroform**	CC. Toluene**	UU. 1,1,1,2-Tetrachloroethane	MMM. Naphthalene	EEEE. Acetonitrile
L. 1,2-Dichloroethane	DD. Chlorobenzene*	VV. Isopropylbenzene	NNN. 1,2,3-Trichlorobenzene	FFFF. Acrolein
M. 2-Butanone	EE. Ethylbenzene**	WW. Bromobenzene	OOO. 1,3,5-Trichlorobenzene	GGGG. Acrylonitrile
N. 1,1,1-Trichloroethane	FF. Styrene	XX. 1,2,3-Trichloropropane	PPP. trans-1,2-Dichloroethane	HHHH. 1,4-Dioxane
O. Carbon tetrachloride	GG. Xylenes, total	YY. n-Propylbenzene	QQQ. cis-1,2-Dichloroethane	IIII. Isobutyl alcohol
P. Bromodichloromethane	HH. Vinyl acetate	ZZ. 2-Chlorotoluene	RRR. m,p-Xylenes	JJJJ. Methacrylonitrile
Q. 1,2-Dichloropropane**	II. 2-Chloroethylvinyl ether	AAA. 1,3,5-Trimethylbenzene	SSS. o-Xylene	KKKK. Propionitrile
R. cis-1,3-Dichloropropane	JJ. Dichlorodifluoromethane	BBB. 4-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	LLLL. tert-Butanol <i>PC</i>

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

Page: 1 of 1
Reviewer: JTB
2nd Reviewer: R

All circled dates have exceeded the technical holding times.

[illegible]

TECHNICAL HOLDING TIME CRITERIA

Water unpreserved:

Water preserved:

Soil:

Encores unpreserved

Aromatic within 7 days, non-aromatic within 14 days of sample collection.

Both within 14 days of sample collection.

Both within 14 days of sample collection.

48 hours

VALIDATION FINDINGS WORKSHEET

LDC #: (3928 A)
SDG #: BMT 0507 | 561

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Did the laboratory perform a 5 point calibration prior to sample analysis?	N	N/A
--	---	-----

Did the laboratory perform a 5 point calibration prior to sample analysis?
Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?

Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation? $r^2 \geq 0.99$

Did the initial calibration meet the acceptance criteria?

Were all %RSDs and RRFs within the validation criteria of ≤ 30 %RSD and ≥ 0.05 RRF?

[illegible]

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

	Y	N	N/A
	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Y/N	N/A	Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y	N	N/A

Y	N	N/A	Were all %D and RRFs within the validation criteria of $\leq 25\%$ D and ≥ 0.05 RRF?
Y	N	N/A	Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?

[illegible]

VALIDATION FINDINGS WORKSHEET

Page: 1 of 1
Reviewer: MC
2nd Reviewer: g

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Was a LCS required? Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	Y	N	N/A
	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

[illegible]

LDC #: 13928 A1
 SDG #: BMIO5071561

VALIDATION FINDINGS WORKSHEET Field Duplicates

Page: 1 of 1
 Reviewer: JVC
 2nd reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A
 Y N N/A

Were field duplicate pairs identified in this SDG?
 Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/kg)		RPD
	1	3	
EE	62	50 u	200
SSS	51	↓	↓
YY	130	100 u	↓
DD	380	124	102
EEE	230	100	79
GGG	270	120	77
Compound	Concentration ()		RPD
			
III	300	160	61

Compound	Concentration ()		RPD

Compound	Concentration ()		RPD

LDC #: 13928 A1

SDG #: BME 05071561

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1

Reviewer: JYC

2nd Reviewer: R

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_s)(C_{is}) / (A_{is})(C_s)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

 A_s = Area of compound, C_s = Concentration of compound, S = Standard deviation of the RRFs X = Mean of the RRFs A_{is} = Area of associated internal standard C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported		Recalculated		Reported		Recalculated	
				RRF (10 std)	RRF (10 std)	RRF (10 std)	Average RRF (Initial)	Average RRF (Initial)	Average RRF (Initial)	%RSD	%RSD
1	ICAL	7/18/05	Methylene chloride (1st internal standard)	3.597e-1	3.597e-1	3.597e-1	3.125e-1	3.125e-1	3.125e-1	13.0	13.0
	MS01		Trichlorethene (2nd internal standard)	3.324	3.324	3.324	3.395	3.395	3.395	6.9	6.9
			Toluene (3rd internal standard)	3.467	3.467	3.467	3.628	3.628	3.628	11.9	11.9
2	ICAL	6/11/05	Methylene chloride (1st internal standard)	2.752e-1	2.752e-1	2.752e-1	2.955e-1	2.955e-1	2.955e-1	7.7	7.7
	MS10		Trichlorethene (2nd internal standard)	2.910	2.910	2.910	2.997	2.997	2.997	3.2	3.2
			Toluene (3rd internal standard)	2.342	2.342	2.342	2.826	2.826	2.826	13.7	13.7
3			Methylene chloride (1st internal standard)								
			Trichlorethene (2nd internal standard)								
			Toluene (3rd internal standard)								
4			Methylene chloride (1st internal standard)								
			Trichlorethene (2nd internal standard)								
			Toluene (3rd internal standard)								

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
 $RRF = (A_s)(C_{is}) / (A_{is})(C_s)$
 $\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$
 $A_s = \text{Area of compound,}$ $A_{is} = \text{Area of associated internal standard}$
 $C_s = \text{Concentration of compound,}$ $C_{is} = \text{Concentration of internal standard}$

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (Initial)	Reported		Recalculated	
					RRF (CC)	%D	RRF (CC)	%D
1	05071904	7/19/05	Methylene chloride (1st internal standard)	0.3124	0.311	0.3	0.311	0.3
			Trichloroethene (2nd internal standard)	3.395	3.664	7.9	3.664	7.9
			Trichloroethene Toluene (3rd internal standard)	3.678	3.796	4.6	3.796	4.6
2	05072704	7/27/05	Methylene chloride (1st internal standard)	0.2558	0.269	5.5	0.269	5.5
			Trichloroethene (2nd internal standard)	2.997	3.450	15.1	3.450	15.1
			Toluene Toluene (3rd internal standard)	2.826	3.040	7.6	3.040	7.6
3			Methylene chloride (1st internal standard)					
			Trichloroethene (2nd internal standard)					
			Toluene (3rd internal standard)					
4			Methylene chloride (1st internal standard)					
			Trichloroethene (2nd internal standard)					
			Toluene (3rd internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 13928 A1
SDG #: BME 0507 1561

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVL
2nd reviewer: h

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: $SF/SS * 100$

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8	2000	1967.57	98	98	0
Bromofluorobenzene	↓	1915.51	96	96	↓
1,2-Dichloroethane-d4		1850.48	93	93	
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

VALIDATION FINDINGS WORKSHEET

Page: 1 of 1
 Reviewer: SV
 2nd Reviewer: [Signature]

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

Where: SSC = Spiked sample concentration
SA = Spike added

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

[illegible]

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Page: 1 of 1
Reviewer: MC
2nd reviewer: [Signature]

DECAT 0.15E

**MCB Camp Pendleton, CTO 102
Data Validation Reports
LDC# 13928**

Polynuclear Aromatic Hydrocarbons

DDC

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Camp Pendleton, CTO 102
Collection Date: July 12, 2005
LDC Report Date: September 8, 2005
Matrix: Soil
Parameters: Polynuclear Aromatic Hydrocarbons
Validation Level: EPA Level III & IV
Laboratory: Alpha Analytical, Inc.

Sample Delivery Group (SDG): BMI05071561

Sample Identification

1523-SW3-10**
1523-SW3-10 Dup
1523-SW7
1523-BS6
1523-BS8**
1523-BS8MS
1523-BS8MSD

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 1523-SW3-10** and 1523-SW3-10 Dup were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples.

XVII. Field Blanks

No field blanks were identified in this SDG.

Camp Pendleton, CTO 102
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG
BMI05071561

No Sample Data Qualified in this SDG

Camp Pendleton, CTO 102
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary
- SDG BMI05071561

No Sample Data Qualified in this SDG



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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-01A
Client I.D. Number: 1523-SW3-10

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	13,000 µg/Kg
2	Acenaphthylene	ND	13,000 µg/Kg
3	Acenaphthene	ND	13,000 µg/Kg
4	Fluorene	ND	13,000 µg/Kg
5	Phenanthrene	ND	13,000 µg/Kg
6	Anthracene	ND	13,000 µg/Kg
7	Fluoranthene	ND	13,000 µg/Kg
8	Pyrene	ND	13,000 µg/Kg
9	Benzo(a)anthracene	ND	13,000 µg/Kg
10	Chrysene	ND	13,000 µg/Kg
11	Benzo(b)fluoranthene	ND	13,000 µg/Kg
12	Benzo(k)fluoranthene	ND	13,000 µg/Kg
13	Benzo(a)pyrene	ND	13,000 µg/Kg
14	Indeno(1,2,3-cd)pyrene	ND	13,000 µg/Kg
15	Dibenz(a,h)anthracene	ND	13,000 µg/Kg
16	Benzo(g,h,i)perylene	ND	13,000 µg/Kg
17	Surr: Nitrobenzene-d5	86	%REC
18	Surr: 2-Fluorobiphenyl	100	%REC
19	Surr: 4-Terphenyl-d14	94	%REC

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger Scholl *Randy Gardner* *Walter Hinchman*
Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

[Signature]
7/21/05

Report Date

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7/21/05



Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-02A
Client I.D. Number: 1523-SW3-10 DUP

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	13,000 µg/Kg
2	Acenaphthylene	ND	13,000 µg/Kg
3	Acenaphthene	ND	13,000 µg/Kg
4	Fluorene	ND	13,000 µg/Kg
5	Phenanthrene	ND	13,000 µg/Kg
6	Anthracene	ND	13,000 µg/Kg
7	Fluoranthene	ND	13,000 µg/Kg
8	Pyrene	ND	13,000 µg/Kg
9	Benzo(a)anthracene	ND	13,000 µg/Kg
10	Chrysene	ND	13,000 µg/Kg
11	Benzo(b)fluoranthene	ND	13,000 µg/Kg
12	Benzo(k)fluoranthene	ND	13,000 µg/Kg
13	Benzo(a)pyrene	ND	13,000 µg/Kg
14	Indeno(1,2,3-cd)pyrene	ND	13,000 µg/Kg
15	Dibenz(a,h)anthracene	ND	13,000 µg/Kg
16	Benzo(g,h,i)perylene	ND	13,000 µg/Kg
17	Surr: Nitrobenzene-d5	85	%REC
18	Surr: 2-Fluorobiphenyl	89	%REC
19	Surr: 4-Terphenyl-d14	87	%REC

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

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Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-03A
Client I.D. Number: 1523-SW7

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	6,600 µg/Kg
2	Acenaphthylene	ND	6,600 µg/Kg
3	Acenaphthene	ND	6,600 µg/Kg
4	Fluorene	ND	6,600 µg/Kg
5	Phenanthrene	ND	6,600 µg/Kg
6	Anthracene	ND	6,600 µg/Kg
7	Fluoranthene	ND	6,600 µg/Kg
8	Pyrene	ND	6,600 µg/Kg
9	Benzo(a)anthracene	ND	6,600 µg/Kg
10	Chrysene	ND	6,600 µg/Kg
11	Benzo(b)fluoranthene	ND	6,600 µg/Kg
12	Benzo(k)fluoranthene	ND	6,600 µg/Kg
13	Benzo(a)pyrene	ND	6,600 µg/Kg
14	Indeno(1,2,3-cd)pyrene	ND	6,600 µg/Kg
15	Dibenz(a,h)anthracene	ND	6,600 µg/Kg
16	Benzo(g,h,i)perylene	ND	6,600 µg/Kg
17	Surr: Nitrobenzene-d5	81	%REC
18	Surr: 2-Fluorobiphenyl	85	%REC
19	Surr: 4-Terphenyl-d14	85	%REC

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hutchinson

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hutchinson, Quality Assurance Officer
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7/21/05

Report Date

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Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-08A
Client I.D. Number: 1523-BS6

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	6,600 µg/Kg
2	Acenaphthylene	ND	6,600 µg/Kg
3	Acenaphthene	ND	6,600 µg/Kg
4	Fluorene	ND	6,600 µg/Kg
5	Phenanthrene	ND	6,600 µg/Kg
6	Anthracene	ND	6,600 µg/Kg
7	Fluoranthene	ND	6,600 µg/Kg
8	Pyrene	ND	6,600 µg/Kg
9	Benzo(a)anthracene	ND	6,600 µg/Kg
10	Chrysene	ND	6,600 µg/Kg
11	Benzo(b)fluoranthene	ND	6,600 µg/Kg
12	Benzo(k)fluoranthene	ND	6,600 µg/Kg
13	Benzo(a)pyrene	ND	6,600 µg/Kg
14	Indeno(1,2,3-cd)pyrene	ND	6,600 µg/Kg
15	Dibenz(a,h)anthracene	ND	6,600 µg/Kg
16	Benzo(g,h,i)perylene	ND	6,600 µg/Kg
17	Surr: Nitrobenzene-d5	83	%REC
18	Surr: 2-Fluorobiphenyl	93	%REC
19	Surr: 4-Terphenyl-d14	90	%REC

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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JS

7/21/05

Report Date

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Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-09A
Client I.D. Number: 1523-BS8

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	13,000 µg/Kg
2	Acenaphthylene	ND	13,000 µg/Kg
3	Acenaphthene	ND	13,000 µg/Kg
4	Fluorene	ND	13,000 µg/Kg
5	Phenanthrene	ND	13,000 µg/Kg
6	Anthracene	ND	13,000 µg/Kg
7	Fluoranthene	ND	13,000 µg/Kg
8	Pyrene	ND	13,000 µg/Kg
9	Benzo(a)anthracene	ND	13,000 µg/Kg
10	Chrysene	ND	13,000 µg/Kg
11	Benzo(b)fluoranthene	ND	13,000 µg/Kg
12	Benzo(k)fluoranthene	ND	13,000 µg/Kg
13	Benzo(a)pyrene	ND	13,000 µg/Kg
14	Indeno(1,2,3-cd)pyrene	ND	13,000 µg/Kg
15	Dibenz(a,h)anthracene	ND	13,000 µg/Kg
16	Benzo(g,h,i)perylene	ND	13,000 µg/Kg
17	Surr: Nitrobenzene-d5	81	%REC
18	Surr: 2-Fluorobiphenyl	103	%REC
19	Surr: 4-Terphenyl-d14	99	%REC

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND - Not Detected

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7/21/05

Report Date

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LDC #: 13928A2

VALIDATION COMPLETENESS WORKSHEET

SDG #: BMI05071561

Level III/IV

Laboratory: Alpha Analytical, Inc.

Date: 9/05/05

Page: 1 of 1

Reviewer: JVL

2nd Reviewer: g

METHOD: GC/MS Polynuclear Aromatic Hydrocarbons (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/12/05
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	
IV.	Continuing calibration	A	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	Not reviewed for Level III validation.
XII.	Compound quantitation/CRQLs	A	Not reviewed for Level III validation.
XIII.	Tentitatively identified compounds (TICs)	N	Not reviewed for Level III validation.
XIV.	System performance	A	Not reviewed for Level III validation.
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 1, 2
XVII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: ** Indicates sample underwent Level IV validation

1	1523-SW3-10**	11	21	31
2	1523-SW3-10 Dup	12	22	32
3	1523-SW7	13	23	33
4	1523-BS6	14	24	34
5	1523-BS8**	15	25	35
6	1523-BS8MS	16	26	36
7	1523-BS8MSD	17	27	37
8	MB 12657	18	28	38
9		19	29	39
10		20	30	40

LDC #: 13928 Ar
SDG #: BME 05071561

VALIDATION FINDINGS CHECKLIST

Page: 1 of 3
Reviewer: JVZ
2nd Reviewer: [Signature]

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples analyzed within the 12 hour clock criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were all percent relative standard deviations (%RSD) \leq 30% and relative response factors (RRF) \geq 0.05?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) \leq 25% and relative response factors (RRF) \geq 0.05?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
V. Blanks				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
VI. Surrogate spike				
Were all surrogate %R within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

LDC #: 13928A2
SDG #: BME 05071561

VALIDATION FINDINGS CHECKLIST

Page: 2 of 3
Reviewer: JVY
2nd Reviewer: J

Validation Area	Yes	No	NA	Findings/Comments
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were the performance evaluation (PE) samples within the acceptance limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were retention times within ± 30 seconds from the associated calibration standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were chromatogram peaks verified and accounted for?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were relative intensities of the major ions within $\pm 20\%$ between the sample and the reference spectra?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
XIV. System performance				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

LDC #: 13928A2
SDG #: 8ME05071561

VALIDATION FINDINGS CHECKLIST

Page: 2 of 3
Reviewer: JVK
2nd Reviewer: Q

Validation Area	Yes	No	NA	Findings/Comments
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	/			
Target compounds were detected in the field duplicates.		/		
XVII. Field blanks				
Field blanks were identified in this SDG.		/		
Target compounds were detected in the field blanks.			/	

LDC #: 13128A2

SDG #: DMF 05071541

VALIDATION FINDINGS WORKSHEET Initial Calibration Calculation Verification

Page: 1 of 1

Reviewer: JLG

2nd Reviewer: R

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_s)(C_u)/(A_u)(C_s)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

 A_s = Area of compound, C_s = Concentration of compound, S = Standard deviation of the RRFs, X = Mean of the RRFs A_u = Area of associated internal standard C_u = Concentration of internal standard X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported		Recalculated		Reported		Recalculated		Reported		Recalculated	
				RRF (4σ std)	RRF (4σ std)	RRF (4σ std)	RRF (4σ std)	Average RRF (Initial)	Average RRF (Initial)	Average RRF (Initial)	Average RRF (Initial)	%RSD	%RSD	%RSD	%RSD
1	1CAL	7/05/08	Phenol (1st internal standard)	1.039	1.039	1.039	1.039	1.071	1.071	1.071	1.071	3.3	3.3	3.3	3.3
			Naphthalene (2nd internal standard)	1.332	1.332	1.332	1.332	1.384	1.384	1.384	1.384	4.7	4.7	4.7	4.7
			Fluorene (3rd internal standard)	1.159	1.159	1.159	1.159	1.213	1.213	1.213	1.213	4.5	4.5	4.5	4.5
			Pentachlorophenol (4th internal standard)	1.278	1.278	1.278	1.278	1.317	1.317	1.317	1.317	6.1	6.1	6.1	6.1
			Bis(2-ethylhexyl)phthalate (5th internal standard)	1.328	1.328	1.328	1.328	1.353	1.353	1.353	1.353	5.2	5.2	5.2	5.2
2			Benzo(a)pyrene (6th internal standard)												
			Phenol (1st internal standard)												
			Naphthalene (2nd internal standard)												
			Fluorene (3rd internal standard)												
			Pentachlorophenol (4th internal standard)												
			Bis(2-ethylhexyl)phthalate (5th internal standard)												
			Benzo(a)pyrene (6th internal standard)												
3			Phenol (1st internal standard)												
			Naphthalene (2nd internal standard)												
			Fluorene (3rd internal standard)												
			Pentachlorophenol (4th internal standard)												
			Bis(2-ethylhexyl)phthalate (5th internal standard)												
			Benzo(a)pyrene (6th internal standard)												

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET Continuing Calibration Results Verification

DC #: 13928A7
 SDG #: BML 05071521

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (A_s) / (C_s) / (A_i) / (C_i)$$

Where: ave. RRF = initial calibration average RRF
 RRF = continuing calibration RRF
 A_s = Area of compound,
 C_s = Concentration of compound,
 A_i = Area of associated internal standard
 C_i = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (Initial)	Reported		Recalculated	
					RRF (CC)	%D	RRF (CC)	%D
1	DS071904	7/19/05	Phenol (1st Internal standard)					
			Naphthalene (2nd Internal standard)	1.071	1.033	3.6	1.033	3.6
			Fluorene (3rd Internal standard)	1.384	1.331	3.8	1.331	3.8
			Phenanthrene (4th Internal standard)	1.213	1.150	5.2	1.150	5.2
			Benzo(a)pyrene (5th Internal standard)	1.317	1.272	3.4	1.272	3.4
			Benzo(e)pyrene (6th Internal standard)	1.253	1.219	2.7	1.219	2.7
2			Phenol (1st Internal standard)					
			Naphthalene (2nd Internal standard)					
			Fluorene (3rd Internal standard)					
			Pentachlorophenol (4th Internal standard)					
			Bis(2-ethylhexyl)phthalate (5th Internal standard)					
			Benzo(a)pyrene (6th Internal standard)					
3			Phenol (1st Internal standard)					
			Naphthalene (2nd Internal standard)					
			Fluorene (3rd Internal standard)					
			Pentachlorophenol (4th Internal standard)					
			Bis(2-ethylhexyl)phthalate (5th Internal standard)					
			Benzo(a)pyrene (6th Internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 13928 A2
SDG #: BMT 05071561

VALIDATION FINDINGS WORKSHEET Surrogate Results Verification

Page: 1 of 1
Reviewer: JTC
2nd reviewer: h

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: $SF/SS \times 100$

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	6250	5392.48	86	86	0
2-Fluorobiphenyl		6241.45	100	100	0
Terphenyl-d14		5862.72	94	94	0
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

VALIDATION FINDINGS WORKSHEET Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: JY
2nd Reviewer: R

LDC #: 12928A2
SDG #: BME 05071561

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * (SSC - SC) / SA$ Where: SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added

RPD = $1 MS - MSD | * 2 / (MS + MSD)$ MS = Matrix spike percent recovery MSD = Matrix spike duplicate percent recovery

MS/MSD samples: 6/7

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD		MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol											
2-Chlorophenol											
1,4-Dichlorobenzene											
N-Nitroso-di-n-propylamine											
1,2,4-Trichlorobenzene											
4-Chloro-3-methylphenol											
Acenaphthene	6250	6250	0	6020	6200	96	94	99	99	3.0	3.0
4-Nitrophenol											
2,4-Dinitrotoluene											
Pentachlorophenol											
Pyrene	6240	6250	0	5430	5250	87	87	84	84	3.3	3.4

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 12428 AY

SDG #: 0000000714

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1

Reviewer: JLC

2nd Reviewer: J

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * (SC/SA)$ Where: SSC = Spike concentration
SA = Spike addedRPD = $100 * (LCS - LCSD) / (LCS + LCSD)$

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 12657

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS		LCSD		Percent Recovery		Percent Recovery		LCS/LCSD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Phenol														
2-Chlorophenol														
1,4-Dichlorobenzene														
N-Nitroso-di-n-propylamine														
1,2,4-Trichlorobenzene														
4-Chloro-3-methylphenol														
Acenaphthene	6250	NA	0	5280	85	84								
4-Nitrophenol														
2,4-Dinitrotoluene														
Pentachlorophenol														
Pyrene	6250	NA	0	4950	79	79								

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 13928A7
SDG #: BMI05671561

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: a

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?
Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_s)(I_s)(V_s)(DF)(2.0)}{(A_r)(RRF)(V_r)(V_s)(\%S)}$$

- | | | |
|----------|---|--|
| A_x | = | Area of the characteristic ion (EICP) for the compound to be measured |
| A_{is} | = | Area of the characteristic ion (EICP) for the specific internal standard |
| I_s | = | Amount of internal standard added in nanograms (ng) |
| V_o | = | Volume or weight of sample extract in milliliters (ml) or grams (g). |
| V_i | = | Volume of extract injected in microliters (ul) |
| V_t | = | Volume of the concentrated extract in microliters (ul) |
| Df | = | Dilution Factor. |
| %S | = | Percent solids, applicable to soil and solid matrices only. |
| 2.0 | = | Factor of 2 to account for GPC cleanup |

Example:

Sample I.D. _____, AD

$$\text{Conc.} = \frac{(\quad) (\quad) (\quad) (\quad) (\quad) (\quad)}{(\quad) (\quad) (\quad) (\quad) (\quad) (\quad)}$$
[illegible]

MCB Camp Pendleton, CTO 102
Data Validation Reports
LDC# 13928

TPH as Extractables

LDC

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Camp Pendleton, CTO 102
Collection Date: July 12 through July 13, 2005
LDC Report Date: September 4, 2005
Matrix: Soil
Parameters: Total Petroleum Hydrocarbons as Extractables
Validation Level: EPA Level III & IV
Laboratory: Alpha Analytical, Inc.
Sample Delivery Group (SDG): BMI05071561

Sample Identification

1523-SW3-10**
1523-SW3-10 Dup
1523-SW7
1523-SW8-10
1523-SW11-10
1523-BS1-12
1523-BS4-13
1523-BS6
1523-BS8**
1523-SW1-10
1523-SW2-10
1523-SW9
1523-SW10
1523-BS2-12
1523-BS3-13
1523-BS5
1523-BS7
1523-SW7MS
1523-SW7MSD

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 19 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for all compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since the sample concentration was greater than the spiked concentration, no data were qualified.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

VI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

VII. System Performance

The system performance was acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

Samples 1523-SW3-10** and 1523-SW3-10 Dup were identified as field duplicates. No total petroleum hydrocarbons as extractables were detected in any of the samples with the following exceptions:

Compound	Concentration (mg/Kg)		RPD
	1523-SW3-10**	1523-SW3-10 Dup	
TPH as diesel	2300	2100	9
TPH as oil	530	550	4

X. Field Blanks

No field blanks were identified in this SDG.

Camp Pendleton, CTO 102

Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG BMI05071561

No Sample Data Qualified in this SDG

Camp Pendleton, CTO 102

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG BMI05071561

No Sample Data Qualified in this SDG



Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667
Date Received : 07/15/05

Job#: T0102

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B/DHS LUFT Manual

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : 1523-SW3-10	TPH-E (Diesel)	2,300	5.0 mg/Kg	07/12/05	07/19/05
Lab ID : BMI05071561-01A	TPH-E (Oil)	530 RG	10 mg/Kg	07/12/05	07/19/05
	Surr: Nonane	61	%REC	07/12/05	07/19/05
Client ID : 1523-SW3-10 DUP	TPH-E (Diesel)	2,100	5.0 mg/Kg	07/12/05	07/19/05
Lab ID : BMI05071561-02A	TPH-E (Oil)	550 RG	10 mg/Kg	07/12/05	07/19/05
	Surr: Nonane	97	%REC	07/12/05	07/19/05
Client ID : 1523-SW7	TPH-E (Diesel)	1,400	5.0 mg/Kg	07/12/05	07/19/05
Lab ID : BMI05071561-03A	TPH-E (Oil)	390 RG	10 mg/Kg	07/12/05	07/19/05
	Surr: Nonane	104	%REC	07/12/05	07/19/05
Client ID : 1523-SW8-10	TPH-E (Diesel)	ND <i>u</i>	5.0 mg/Kg	07/13/05	07/19/05
Lab ID : BMI05071561-04A	TPH-E (Oil)	ND <i>u</i>	10 mg/Kg	07/13/05	07/19/05
	Surr: Nonane	97	%REC	07/13/05	07/19/05
Client ID : 1523-SW11-10	TPH-E (Diesel)	2,300	5.0 mg/Kg	07/13/05	07/19/05
Lab ID : BMI05071561-05A	TPH-E (Oil)	600 RG	10 mg/Kg	07/13/05	07/19/05
	Surr: Nonane	50	%REC	07/13/05	07/19/05
Client ID : 1523-BS1-12	TPH-E (Diesel)	2,000	5.0 mg/Kg	07/12/05	07/19/05
Lab ID : BMI05071561-06A	TPH-E (Oil)	520 RG	10 mg/Kg	07/12/05	07/19/05
	Surr: Nonane	50	%REC	07/12/05	07/19/05
Client ID : 1523-BS4-13	TPH-E (Diesel)	2,500	5.0 mg/Kg	07/12/05	07/19/05
Lab ID : BMI05071561-07A	TPH-E (Oil)	600 RG	10 mg/Kg	07/12/05	07/19/05
	Surr: Nonane	53	%REC	07/12/05	07/19/05
Client ID : 1523-BS6	TPH-E (Diesel)	1,600	5.0 mg/Kg	07/12/05	07/19/05
Lab ID : BMI05071561-08A	TPH-E (Oil)	440 RG	10 mg/Kg	07/12/05	07/19/05
	Surr: Nonane	100	%REC	07/12/05	07/19/05
Client ID : 1523-BS8	TPH-E (Diesel)	2,800	5.0 mg/Kg	07/12/05	07/19/05
Lab ID : BMI05071561-09A	TPH-E (Oil)	660 RG	10 mg/Kg	07/12/05	07/19/05
	Surr: Nonane	115	%REC	07/12/05	07/19/05
Client ID : 1523-SW1-10	TPH-E (Diesel)	2,100	5.0 mg/Kg	07/12/05	07/19/05
Lab ID : BMI05071561-10A	TPH-E (Oil)	460 RG	10 mg/Kg	07/12/05	07/19/05
	Surr: Nonane	108	%REC	07/12/05	07/19/05

T0102

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Page 1 of 2



Alpha Analytical, Inc.

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Client ID :	1523-SW2-10	TPH-E (Diesel)	1,200		5.0 mg/Kg	07/12/05	07/20/05
Lab ID :	BMI05071561-11A	TPH-E (Oil)	300	RG	10 mg/Kg	07/12/05	07/20/05
		Surr: Nonane	91		%REC	07/12/05	07/20/05
Client ID :	1523-SW9	TPH-E (Diesel)	7.8		5.0 mg/Kg	07/13/05	07/20/05
Lab ID :	BMI05071561-12A	TPH-E (Oil)	ND	u	10 mg/Kg	07/13/05	07/20/05
		Surr: Nonane	96		%REC	07/13/05	07/20/05
Client ID :	1523-SW10	TPH-E (Diesel)	ND	u	5.0 mg/Kg	07/13/05	07/20/05
Lab ID :	BMI05071561-13A	TPH-E (Oil)	ND	↓	10 mg/Kg	07/13/05	07/20/05
		Surr: Nonane	99		%REC	07/13/05	07/20/05
Client ID :	1523-BS2-12	TPH-E (Diesel)	310		5.0 mg/Kg	07/12/05	07/20/05
Lab ID :	BMI05071561-14A	TPH-E (Oil)	83	RG	10 mg/Kg	07/12/05	07/20/05
		Surr: Nonane	98		%REC	07/12/05	07/20/05
Client ID :	1523-BS3-13	TPH-E (Diesel)	330		5.0 mg/Kg	07/12/05	07/20/05
Lab ID :	BMI05071561-15A	TPH-E (Oil)	81	RG	10 mg/Kg	07/12/05	07/20/05
		Surr: Nonane	56		%REC	07/12/05	07/20/05
Client ID :	1523-BS5	TPH-E (Diesel)	610		5.0 mg/Kg	07/12/05	07/20/05
Lab ID :	BMI05071561-16A	TPH-E (Oil)	150	RG	10 mg/Kg	07/12/05	07/20/05
		Surr: Nonane	97		%REC	07/12/05	07/20/05
Client ID :	1523-BS7	TPH-E (Diesel)	2,600		5.0 mg/Kg	07/13/05	07/20/05
Lab ID :	BMI05071561-17A	TPH-E (Oil)	500	RG	10 mg/Kg	07/13/05	07/20/05
		Surr: Nonane	128		%REC	07/13/05	07/20/05

G = Compounds outside the range of diesel have varying amounts of recovery.

R = Reported oil concentration may include some undifferentiated additional lighter-end hydrocarbons.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

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128
7/21/05

Report Date

Capalos

LDC #: 13928A8

VALIDATION COMPLETENESS WORKSHEET

Date: 9/10/05

SDG #: BMI05071561

Level III/IV

Page: 1 of 1

Laboratory: Alpha Analytical, Inc.

Reviewer: JVG

2nd Reviewer: J

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/12-13/05
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	SW	
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	A	Not reviewed for Level III validation.
VI.	Compound Quantitation and CRQLs	A	Not reviewed for Level III validation.
VII.	System Performance	A	Not reviewed for Level III validation.
VIII.	Overall assessment of data	A	
IX.	Field duplicates	SW	D = 1, 2
X.	Field blanks	N	

Note: A = Acceptable ND = No compounds detected D = Duplicate
 N = Not provided/applicable R = Rinsate TB = Trip blank
 SW = See worksheet FB = Field blank EB = Equipment blank

Soil
 Validated Samples: ** Indicates sample underwent Level IV validation

1	1523-SW3-10** D	11	1523-SW2-10	21	MBK - 12671	31	
2	1523-SW3-10 Dup D	12	1523-SW9	22		32	
3	1523-SW7	13	1523-SW10	23		33	
4	1523-SW8-10	14	1523-BS2-12	24		34	
5	1523-SW11-10	15	1523-BS3-13	25		35	
6	1523-BS1-12	16	1523-BS5	26		36	
7	1523-BS4-13	17	1523-BS7	27		37	
8	1523-BS6	18	1523 SW7MS	28		38	
9	1523-BS8**	19	1523-SW7MSD	29		39	
10	1523-SW1-10	20		30		40	

Notes: _____

LDC #: 13928A8
SDG #: BMI0507154

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: JLG
2nd Reviewer: J

Method: GC HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Continuing calibration				
What type of continuing calibration calculation was performed? <u>%D</u> or <u>%R</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 15% or percent recoveries 85-115%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IV. Blanks				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
V. Surrogate spikes				
Were all surrogate %R within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
VII. Laboratory control samples				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

LDC #: B928A8
 SDG #: INI 05071561

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
 Reviewer: JVL
 2nd Reviewer: [Signature]

Validation Area	Yes	No	NA	Findings/Comments
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were the performance evaluation (PE) samples within the acceptance limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XII. System performance				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIV. Field duplicates				
Were field duplicate pairs identified in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field duplicates?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XV. Field blanks				
Were field blanks identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

VALIDATION FINDINGS WORKSHEET

METHOD: GC HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Q	Y	N	N/A	Q	Y	N	N/A
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?							

Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?	N	N/A
--	---	-----

	Y	N	N/A
Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?			

[illegible]

VALIDATION FINDINGS WORKSHEET

Field Duplicates

LDC #: 13928A8
SDG #: BMI0507561

METHOD: GC HPLC

Field duplicate pairs identified in this SDG?	Field duplicate pairs identified in the field duplicate pairs?
Y/N N/A	Y/N N/A
Y/N N/A	Y/N N/A

[illegible][illegible]

LDC #: 13928 A8
SDG #: BMT 05071561

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JZ
2nd Reviewer: R

METHOD: GC HPLC

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = $100 * (S/X)$
A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported		Recalculated		Reported		Recalculated	
				CF (1000 std)	CF (1000 std)	Average CF (initial)	Average CF (initial)	%RSD	%RSD	Average CF (initial)	%RSD
1	1CAL	6/06/05	Diesel	1.3607 e-4	1.3601584 e-4	1.3471 e-4	1.3471 e-4	6.8%	6.8%	1.3471 e-4	6.8%
2											
3											
4											

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 13928 A8

VALIDATION FINDINGS WORKSHEET **Continuing Calibration Results Verification**

Page: 1 of 1

SDG #: DME 05071561

Reviewer: JVC

2nd Reviewer: R

METHOD: GC ☒ HPLC

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = $100 \times (\text{ave. CF} - \text{CF}) / \text{ave. CF}$ Where: ave. CF = initial calibration average CF
 CF = A/C
 CF = continuing calibration CF
 A = Area of compound
 C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF (cal)/ CCV Conc.	Reported		Recalculated	
					CF/Conc. CCV	%R	CF/Conc. CCV	%R
1	1A071861.D	7/19/05	Diesel	750	274.49	109.79	274.49	109.79
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 13928A8
SDG #: 10105071261
METHOD: ☒ GC ☐ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVC
2nd reviewer: JVC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: $SF/SS \times 100$

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nmame	DB1	100	60.5355	61	61	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

VALIDATION FINDINGS WORKSHEET

LDC #: 13928A8

SDG #: BMF05071561

METHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where

SSC = Spiked sample concentration

SA = Spike added

SC = Sample concentration

$$RPD = ((\{SSCMS - SSCMSD\} * 2) / (SSCMS + SSCMSD)) * 100$$

MS = Matrix spike

MSD = Matrix spike duplicate

MS/MSD samples: 18/19

[illegible]

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

METHOD: GC HPLC

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10% of the reported results?

$$\text{Concentration} = \frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$$

Example:

Sample ID: #1
Compound Name Diesel

$$\text{Concentration} = \frac{(16901017)(1.3471e^{-4})}{-2277}$$
 $\approx 2300 \text{ mg/kg}$

A= Area or height of the compound to be measured

FV= Final Volume of extract

Df= Dilution Factor

RF= Average response factor of the compound

In the initial calibration

V_s = Initial volume of the sample

Ws= Initial weight of the sample

%S= Percent Solid

[illegible]

Comments:

Billing Information :
Batelle
505 King Avenue
Columbus, OH 43201

CHAIN-OF-CUSTODY RECORD

Client:
Batelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406
Bob Janosy
TEL : (614) 424-7160 X
FAX : (614) 424-3667
E-Mail janosyr@batelle.org

CA AMENDED
Page: 1 of 2

WorkOrder : BMI05071561
Report Due By : 5:00 PM On : 22-Jul-05

Columbus, OH 43201
Report Attention : Bob Janosy
CC Report :
Job : T0102
PO : 190907
Clients COC # : 6904/6905


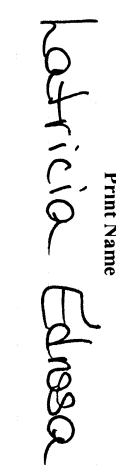
EDD Required : Yes
Sampled by : Scott Lowe

Cooler Temp : 4 °C
Date Printed: 19-Jul-05

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD with Surrogates

Alpha Sample ID	Client Sample ID	Collection Matrix Date	No. of Bottles			BNA_S	TPHE_S	VOC_S	Requested Tests	Sample Remarks
			ORG	SUB	TAT					
BMI05071561-01A	1523-SW3-10	SO 07/12/05 11:05	5	0	5	PNA/PAH	TPHE_C	8260/MTBE_C		
BMI05071561-02A	1523-SW-10 DUP	SO 07/12/05 11:05	5	0	5	PNA/PAH	TPHE_C	8260/MTBE_C		
BMI05071561-03A	1523-SW7	SO 07/12/05 14:45	5	0	5	PNA/PAH	TPHE_C	8260/MTBE_C		
BMI05071561-04A	1523-SW8-10	SO 07/13/05 12:05	4	0	5		TPHE_C	8260/MTBE_C		
BMI05071561-05A	1523-SW11-10	SO 07/13/05 17:00	4	0	5		TPHE_C	8260/MTBE_C		
BMI05071561-06A	1523-BS1-12	SO 07/12/05 10:03	4	0	5		TPHE_C	8260/MTBE_C		No footage noted on encores
BMI05071561-07A	1523-BS4-13	SO 07/12/05 12:45	4	0	5		TPHE_C	8260/MTBE_C		
BMI05071561-08A	1523-BS6	SO 07/12/05 15:00	5	0	5	PNA/PAH	TPHE_C	8260/MTBE_C		
BMI05071561-09A	1523-BS8	SO 07/12/05 15:55	5	0	5	PNA/PAH	TPHE_C	8260/MTBE_C		sample label date/footage differs from chain , 1523-BS8-13, 7/13 , no footage on encores

Comments: Security seals intact, frozen ice. Level IV QC required. Samples should be used as the control spike sample if possible. If Jet Fuel is seen, report as Diesel and Footnote report. Report J-values for Benzene down to 0.25 ug/L. Various samples rec'd w/ : th sample label date and Id differences. Sample 12 rec'd broken, large amount salvaged lab used for analysis. Encore samples 01,03,08,09 frozen on 7/12/05 through 1000 7/14/05....SOME ENCORES HAVE EXPIRED. Amended 07/19/05. See W.O. Info.

Received by:  Signature  Print Name
Company Alpha Analytical, Inc. Date/Time 7/19/05 10:52

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

Battelle
505 King Avenue
Columbus, OH 43201

Client:

Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Report Attention : Bob Janosy

CC Report :

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

Bob Janosy

TEL : (614) 424-7160 x
FAX : (614) 424-3667
Email janosy@battelle.org

CA
AMENDED

Page: 2 of 2

WorkOrder : BMI05071561

Report Due By : 5:00 PM On : 22-Jul-05

EDD Required : Yes

Sampled by : Scott Lowe

Cooler Temp : 4 °C

Date Printed:
19-Jul-05

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Collection Matrix Date	No. of Bottles			PWS #	Requested Tests			Sample Remarks
			ORG	SUB	TAT		BNA_S	TPHE_S	VOC_S	
BMI05071561-10A	1523-SW1-10	SO 07/12/05 10:10	1	0	5			TPHE_C		
BMI05071561-11A	1523-SW2-10	SO 07/12/05 10:15	1	0	5			TPHE_C		
BMI05071561-12A	1523-SW9	SO 07/13/05 12:07	1	0	5			TPHE_C		Broken jar, sample label footage noted, 1523-SW9-10', no footage on chain
BMI05071561-13A	1523-SW10	SO 07/13/05 15:57	1	0	5			TPHE_C		sample label footage noted, 1523-SW10-10', no footage on chain
BMI05071561-14A	1523-BS2-12	SO 07/12/05 11:00	1	0	5			TPHE_C		
BMI05071561-15A	1523-BS3-13	SO 07/12/05 11:50	1	0	5			TPHE_C		
BMI05071561-16A	1523-BS5	SO 07/12/05 13:30	1	0	5			TPHE_C		
BMI05071561-17A	1523-BS7	SO 07/13/05 12:10	1	0	5			TPHE_C		sample label footage noted, 1523-BS7-13', no footage on chain..

Comments:

Security seals intact, frozen ice. Level IV QC required. Samples should be used as the control spike sample if possible. If Jet Fuel is seen, report as Diesel and Footnote report. Report J-values for Benzene down to 0.25 ug/L. Various samples rec'd w/ : th sample label date and Id differences. Sample 12 rec'd broken, large amount salvaged lab used for analysis. Encore samples 01,03,08,09 frozen on 7/12/05 through 1000 7/14/05.....SOME ENCORES HAVE EXPIRED. Amended 07/19/05: See W.O. Info.

Received by:

Signature

Print Name

Company

Date/Time

Alpha Analytical, Inc.

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:

Name BOB JANDOSY
Address 505 KINE AVE.
City, State, Zip COLUMBUS, OH 43201
Phone Number 614/424-3160 Fax _____



Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?

AZ ☐ CA ☒ NV ☐ WA ☐
ID ☐ OR ☐ OTHER ☐

Page # 1 of 2

Analyses Required

6904

Client Name BATELLEP.O. # 190907Job # 70102

Address

505 KINE AVE.

Email Address

JANDOSY@BATELLE.ORG

City, State, Zip

COLUMBUS, OH 43201

Phone #

614/424-3160

Fax #

Time

Sampled

Date

See Key

Matrix*

Below

Office Use Only

Sampled by

Lab ID Number

Sample Description

TAT

Field

Filtered

Total and type of containers

** See below

TPH-D

VOCs

PNAs

Required QC Level?

I

II

III

IV

EDD / EDP? YES

NO

Global ID #

REMARKS

1105

7-12

SD

01

1523-SW3-10

N

5-3

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

ADDITIONAL INSTRUCTIONS:

13

1523-SW10

1-3

X

X

X

X

X

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Relinquished by

Signature

Print Name

Billing Information:

Name Bob Jones
 Address 505 LNK AVE
 City, State, Zip Columbus, OH 43201
 Phone Number 614/424-7160 Fax _____



Alpha Analytical, Inc.
 255 Glendale Avenue, Suite 21
 Sparks, Nevada 89431-5778
 Phone (775) 355-1044
 Fax (775) 355-0406

Samples Collected From Which State?
 AZ _____ CA ☒ NV _____ WA _____
 ID _____ OR _____ OTHER _____

Page # 2 of 2

Analyses Required

6905

Client Name BATELLE

P.O. # 190907

Job # _____

Address 505 LNK AVE.

EMail Address

JH051RC@BATELLE-026

City, State, Zip Columbus, OH 43201

Phone # 614.424.7160

Fax # _____

Time Date Matrix*
 Sampled Sampled See Key Below

Office Use Only
 Lab ID Number

Sampled by Scott Lowe

Report Attention Bob Jones

Sample Description

TAT

Field Filtered

Total and type of containers

** See below

Required QC Level?

I II III IV

EDD / EDF? YES _____ NO _____

Global ID # _____

REMARKS

1100 7-12 50

14

1523-B52-12

N

1-5

X

TPH-D

1150 7-12 1

15

1523-B53-13

1

1-5

X

1330 7-12 1

16

1523-B55

1

1-5

X

1210 7-13 1

17

1523-B57

1

1-5

X

Label ID 1523-B57-13
 no footage on claim

ADDITIONAL INSTRUCTIONS:

Relinquished by <u>Scott Lowe</u>	Signature	Print Name	Company	Date	Time
Received by <u>Alpha</u>					
Relinquished by					
Received by					
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other ** : L-Lier V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other
 NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.



Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667
Date Received : 07/15/05

Job#: T0102

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B/DHS LUFT Manual

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	1523-SW3-10	TPH-E (Diesel)	2,300	5.0 mg/Kg	07/12/05	07/19/05
Lab ID :	BMI05071561-01A	TPH-E (Oil)	530 RG	10 mg/Kg	07/12/05	07/19/05
		Surr: Nonane	61	%REC	07/12/05	07/19/05
Client ID :	1523-SW3-10 DUP	TPH-E (Diesel)	2,100	5.0 mg/Kg	07/12/05	07/19/05
Lab ID :	BMI05071561-02A	TPH-E (Oil)	550 RG	10 mg/Kg	07/12/05	07/19/05
		Surr: Nonane	97	%REC	07/12/05	07/19/05
Client ID :	1523-SW7	TPH-E (Diesel)	1,400	5.0 mg/Kg	07/12/05	07/19/05
Lab ID :	BMI05071561-03A	TPH-E (Oil)	390 RG	10 mg/Kg	07/12/05	07/19/05
		Surr: Nonane	104	%REC	07/12/05	07/19/05
Client ID :	1523-SW8-10	TPH-E (Diesel)	ND	5.0 mg/Kg	07/13/05	07/19/05
Lab ID :	BMI05071561-04A	TPH-E (Oil)	ND	10 mg/Kg	07/13/05	07/19/05
		Surr: Nonane	97	%REC	07/13/05	07/19/05
Client ID :	1523-SW11-10	TPH-E (Diesel)	2,300	5.0 mg/Kg	07/13/05	07/19/05
Lab ID :	BMI05071561-05A	TPH-E (Oil)	600 RG	10 mg/Kg	07/13/05	07/19/05
		Surr: Nonane	50	%REC	07/13/05	07/19/05
Client ID :	1523-BS1-12	TPH-E (Diesel)	2,000	5.0 mg/Kg	07/12/05	07/19/05
Lab ID :	BMI05071561-06A	TPH-E (Oil)	520 RG	10 mg/Kg	07/12/05	07/19/05
		Surr: Nonane	50	%REC	07/12/05	07/19/05
Client ID :	1523-BS4-13	TPH-E (Diesel)	2,500	5.0 mg/Kg	07/12/05	07/19/05
Lab ID :	BMI05071561-07A	TPH-E (Oil)	600 RG	10 mg/Kg	07/12/05	07/19/05
		Surr: Nonane	53	%REC	07/12/05	07/19/05
Client ID :	1523-BS6	TPH-E (Diesel)	1,600	5.0 mg/Kg	07/12/05	07/19/05
Lab ID :	BMI05071561-08A	TPH-E (Oil)	440 RG	10 mg/Kg	07/12/05	07/19/05
		Surr: Nonane	100	%REC	07/12/05	07/19/05
Client ID :	1523-BS8	TPH-E (Diesel)	2,800	5.0 mg/Kg	07/12/05	07/19/05
Lab ID :	BMI05071561-09A	TPH-E (Oil)	660 RG	10 mg/Kg	07/12/05	07/19/05
		Surr: Nonane	115	%REC	07/12/05	07/19/05
Client ID :	1523-SW1-10	TPH-E (Diesel)	2,100	5.0 mg/Kg	07/12/05	07/19/05
Lab ID :	BMI05071561-10A	TPH-E (Oil)	460 RG	10 mg/Kg	07/12/05	07/19/05
		Surr: Nonane	108	%REC	07/12/05	07/19/05



Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Client ID :	1523-SW2-10	TPH-E (Diesel)	1,200		5.0 mg/Kg	07/12/05	07/20/05
Lab ID :	BMI05071561-11A	TPH-E (Oil)	300	RG	10 mg/Kg	07/12/05	07/20/05
		Surr: Nonane	91		%REC	07/12/05	07/20/05
Client ID :	1523-SW9	TPH-E (Diesel)	7.8		5.0 mg/Kg	07/13/05	07/20/05
Lab ID :	BMI05071561-12A	TPH-E (Oil)	ND		10 mg/Kg	07/13/05	07/20/05
		Surr: Nonane	96		%REC	07/13/05	07/20/05
Client ID :	1523-SW10	TPH-E (Diesel)	ND		5.0 mg/Kg	07/13/05	07/20/05
Lab ID :	BMI05071561-13A	TPH-E (Oil)	ND		10 mg/Kg	07/13/05	07/20/05
		Surr: Nonane	99		%REC	07/13/05	07/20/05
Client ID :	1523-BS2-12	TPH-E (Diesel)	310		5.0 mg/Kg	07/12/05	07/20/05
Lab ID :	BMI05071561-14A	TPH-E (Oil)	83	RG	10 mg/Kg	07/12/05	07/20/05
		Surr: Nonane	98		%REC	07/12/05	07/20/05
Client ID :	1523-BS3-13	TPH-E (Diesel)	330		5.0 mg/Kg	07/12/05	07/20/05
Lab ID :	BMI05071561-15A	TPH-E (Oil)	81	RG	10 mg/Kg	07/12/05	07/20/05
		Surr: Nonane	56		%REC	07/12/05	07/20/05
Client ID :	1523-BS5	TPH-E (Diesel)	610		5.0 mg/Kg	07/12/05	07/20/05
Lab ID :	BMI05071561-16A	TPH-E (Oil)	150	RG	10 mg/Kg	07/12/05	07/20/05
		Surr: Nonane	97		%REC	07/12/05	07/20/05
Client ID :	1523-BS7	TPH-E (Diesel)	2,600		5.0 mg/Kg	07/13/05	07/20/05
Lab ID :	BMI05071561-17A	TPH-E (Oil)	500	RG	10 mg/Kg	07/13/05	07/20/05
		Surr: Nonane	128		%REC	07/13/05	07/20/05

G = Compounds outside the range of diesel have varying amounts of recovery.

R = Reported oil concentration may include some undifferentiated additional lighter-end hydrocarbons.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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[Signature]

7/21/05

Report Date



Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-01A
Client I.D. Number: 1523-SW3-10

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Reporting			Reporting		
Compound	Concentration	Limit	Compound	Concentration	Limit
1 Dichlorodifluoromethane	ND	100 µg/Kg	36 m,p-Xylene	ND	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	51	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	130	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	380	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	230	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	270	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	300	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	1,300 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	93	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	98	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	96	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethene	ND	100 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	62	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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RJ

7/21/05

Report Date



Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-02A
Client I.D. Number: 1523-SW3-10 DUP

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Reporting			Reporting		
Compound	Concentration	Limit	Compound	Concentration	Limit
1 Dichlorodifluoromethane	ND	100 µg/Kg	36 m,p-Xylene	ND	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	ND	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	ND	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	120	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	100	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	120	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	160	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	900 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	94	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	95	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	95	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethene	ND	100 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	ND	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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[Signature]

7/21/05

Report Date



Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-03A
Client I.D. Number: 1523-SW7

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Reporting			Reporting		
Compound	Concentration	Limit	Compound	Concentration	Limit
1 Dichlorodifluoromethane	ND	100 µg/Kg	36 m,p-Xylene	ND	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	ND	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	ND	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	ND	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	ND	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	ND	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	110	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	700 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	93	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	95	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	98	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethene	ND	100 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	ND	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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[Signature]
7/21/05

Report Date



Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-04A
Client I.D. Number: 1523-SW8-10

Sampled: 07/13/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Reporting			Reporting		
Compound	Concentration	Limit	Compound	Concentration	Limit
1 Dichlorodifluoromethane	ND	20 µg/Kg	36 m,p-Xylene	ND	5.0 µg/Kg
2 Chloromethane	ND	40 µg/Kg	37 Bromoform	ND	20 µg/Kg
3 Vinyl chloride	ND	20 µg/Kg	38 Styrene	ND	20 µg/Kg
4 Chloroethane	ND	20 µg/Kg	39 o-Xylene	ND	5.0 µg/Kg
5 Bromomethane	ND	40 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6 Trichlorofluoromethane	ND	20 µg/Kg	41 1,2,3-Trichloropropane	ND	40 µg/Kg
7 1,1-Dichloroethene	ND	20 µg/Kg	42 Isopropylbenzene	ND	20 µg/Kg
8 Dichloromethane	ND	40 µg/Kg	43 Bromobenzene	ND	20 µg/Kg
9 trans-1,2-Dichloroethene	ND	20 µg/Kg	44 n-Propylbenzene	ND	20 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	5.0 µg/Kg	45 4-Chlorotoluene	ND	20 µg/Kg
11 1,1-Dichloroethane	ND	20 µg/Kg	46 2-Chlorotoluene	ND	20 µg/Kg
12 cis-1,2-Dichloroethene	ND	20 µg/Kg	47 1,3,5-Trimethylbenzene	ND	20 µg/Kg
13 Bromochloromethane	ND	20 µg/Kg	48 tert-Butylbenzene	ND	20 µg/Kg
14 Chloroform	ND	20 µg/Kg	49 1,2,4-Trimethylbenzene	ND	20 µg/Kg
15 2,2-Dichloropropane	ND	20 µg/Kg	50 sec-Butylbenzene	ND	20 µg/Kg
16 1,2-Dichloroethane	ND	20 µg/Kg	51 1,3-Dichlorobenzene	ND	20 µg/Kg
17 1,1,1-Trichloroethane	ND	20 µg/Kg	52 1,4-Dichlorobenzene	ND	20 µg/Kg
18 1,1-Dichloropropene	ND	20 µg/Kg	53 4-Isopropyltoluene	ND	20 µg/Kg
19 Carbon tetrachloride	ND	20 µg/Kg	54 1,2-Dichlorobenzene	ND	20 µg/Kg
20 Benzene	ND	5.0 µg/Kg	55 n-Butylbenzene	ND	20 µg/Kg
21 Dibromomethane	ND	20 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	100 µg/Kg
22 1,2-Dichloropropane	ND	20 µg/Kg	57 1,2,4-Trichlorobenzene	ND	40 µg/Kg
23 Trichloroethene	ND	20 µg/Kg	58 Naphthalene	ND	40 µg/Kg
24 Bromodichloromethane	ND	20 µg/Kg	59 Hexachlorobutadiene	ND	40 µg/Kg
25 cis-1,3-Dichloropropene	ND	20 µg/Kg	60 1,2,3-Trichlorobenzene	ND	40 µg/Kg
26 trans-1,3-Dichloropropene	ND	20 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	94	%REC
27 1,1,2-Trichloroethane	ND	20 µg/Kg	62 Surr: Toluene-d8	96	%REC
28 Toluene	ND	5.0 µg/Kg	63 Surr: 4-Bromofluorobenzene	91	%REC
29 1,3-Dichloropropane	ND	20 µg/Kg			
30 Dibromochloromethane	ND	20 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	40 µg/Kg			
32 Tetrachloroethene	ND	20 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	20 µg/Kg			
34 Chlorobenzene	ND	20 µg/Kg			
35 Ethylbenzene	ND	5.0 µg/Kg			

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 2 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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[Signature]
7/21/05

Report Date



Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-05A
Client I.D. Number: 1523-SW11-10

Sampled: 07/13/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Reporting			Reporting		
Compound	Concentration	Limit	Compound	Concentration	Limit
1 Dichlorodifluoromethane	ND	100 µg/Kg	36 m,p-Xylene	ND	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	ND	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	ND	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	ND	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	140	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	ND	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	120	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	400 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	92	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	95	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	96	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethene	ND	100 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	ND	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was received and extracted within holding time.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

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7/21/05

Report Date



Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-06A
Client I.D. Number: 1523-BS1-12

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Reporting			Reporting		
Compound	Concentration	Limit	Compound	Concentration	Limit
1 Dichlorodifluoromethane	ND	100 µg/Kg	36 m,p-Xylene	ND	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	ND	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	ND	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	110	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	160	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	200	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	220	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	1,100 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	92	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	96	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	96	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethene	ND	100 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	ND	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 4 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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7/21/05

Report Date

Page 1 of 1



Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-07A
Client I.D. Number: 1523-BS4-13

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Reporting			Reporting		
Compound	Concentration	Limit	Compound	Concentration	Limit
1 Dichlorodifluoromethane	ND	100 µg/Kg	36 m,p-Xylene	ND	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	ND	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	ND	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	ND	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	ND	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	120	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	140	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	800 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	91	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	96	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	97	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethene	ND	100 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	ND	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days and 2 hours, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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7/21/05

Report Date



Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-08A
Client I.D. Number: 1523-BS6

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Reporting			Reporting		
Compound	Concentration	Limit	Compound	Concentration	Limit
1 Dichlorodifluoromethane	ND	200 µg/Kg	36 m,p-Xylene	ND	100 µg/Kg
2 Chloromethane	ND	400 µg/Kg	37 Bromoform	ND	200 µg/Kg
3 Vinyl chloride	ND	200 µg/Kg	38 Styrene	ND	200 µg/Kg
4 Chloroethane	ND	200 µg/Kg	39 o-Xylene	ND	100 µg/Kg
5 Bromomethane	ND	800 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	200 µg/Kg
6 Trichlorofluoromethane	ND	200 µg/Kg	41 1,2,3-Trichloropropane	ND	800 µg/Kg
7 1,1-Dichloroethene	ND	200 µg/Kg	42 Isopropylbenzene	ND	200 µg/Kg
8 Dichloromethane	ND	800 µg/Kg	43 Bromobenzene	ND	200 µg/Kg
9 trans-1,2-Dichloroethene	ND	200 µg/Kg	44 n-Propylbenzene	ND	200 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	100 µg/Kg	45 4-Chlorotoluene	ND	200 µg/Kg
11 1,1-Dichloroethane	ND	200 µg/Kg	46 2-Chlorotoluene	ND	200 µg/Kg
12 cis-1,2-Dichloroethene	ND	200 µg/Kg	47 1,3,5-Trimethylbenzene	ND	200 µg/Kg
13 Bromochloromethane	ND	200 µg/Kg	48 tert-Butylbenzene	ND	200 µg/Kg
14 Chloroform	ND	200 µg/Kg	49 1,2,4-Trimethylbenzene	ND	200 µg/Kg
15 2,2-Dichloropropane	ND	200 µg/Kg	50 sec-Butylbenzene	ND	200 µg/Kg
16 1,2-Dichloroethane	ND	200 µg/Kg	51 1,3-Dichlorobenzene	ND	200 µg/Kg
17 1,1,1-Trichloroethane	ND	200 µg/Kg	52 1,4-Dichlorobenzene	ND	200 µg/Kg
18 1,1-Dichloropropene	ND	200 µg/Kg	53 4-Isopropyltoluene	210	200 µg/Kg
19 Carbon tetrachloride	ND	200 µg/Kg	54 1,2-Dichlorobenzene	ND	200 µg/Kg
20 Benzene	ND	100 µg/Kg	55 n-Butylbenzene	230	200 µg/Kg
21 Dibromomethane	ND	200 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	1,200 µg/Kg
22 1,2-Dichloropropane	ND	200 µg/Kg	57 1,2,4-Trichlorobenzene	ND	800 µg/Kg
23 Trichloroethene	ND	200 µg/Kg	58 Naphthalene	ND	800 µg/Kg
24 Bromodichloromethane	ND	200 µg/Kg	59 Hexachlorobutadiene	ND	800 µg/Kg
25 cis-1,3-Dichloropropene	ND	200 µg/Kg	60 1,2,3-Trichlorobenzene	ND	800 µg/Kg
26 trans-1,3-Dichloropropene	ND	200 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	92	%REC
27 1,1,2-Trichloroethane	ND	200 µg/Kg	62 Surr: Toluene-d8	95	%REC
28 Toluene	ND	100 µg/Kg	63 Surr: 4-Bromofluorobenzene	97	%REC
29 1,3-Dichloropropane	ND	200 µg/Kg			
30 Dibromochloromethane	ND	200 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	800 µg/Kg			
32 Tetrachloroethene	ND	200 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	200 µg/Kg			
34 Chlorobenzene	ND	200 µg/Kg			
35 Ethylbenzene	ND	100 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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[Signature]
7/21/05

Report Date



Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-09A
Client I.D. Number: 1523-BS8

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Volatile Organics by GC/MS EPA Method SW8260B

Reporting			Reporting		
Compound	Concentration	Limit	Compound	Concentration	Limit
1 Dichlorodifluoromethane	ND	100 µg/Kg	36 m,p-Xylene	ND	50 µg/Kg
2 Chloromethane	ND	200 µg/Kg	37 Bromoform	ND	100 µg/Kg
3 Vinyl chloride	ND	100 µg/Kg	38 Styrene	ND	100 µg/Kg
4 Chloroethane	ND	100 µg/Kg	39 o-Xylene	ND	50 µg/Kg
5 Bromomethane	ND	400 µg/Kg	40 1,1,2,2-Tetrachloroethane	ND	100 µg/Kg
6 Trichlorofluoromethane	ND	100 µg/Kg	41 1,2,3-Trichloropropane	ND	400 µg/Kg
7 1,1-Dichloroethene	ND	100 µg/Kg	42 Isopropylbenzene	ND	100 µg/Kg
8 Dichloromethane	ND	400 µg/Kg	43 Bromobenzene	ND	100 µg/Kg
9 trans-1,2-Dichloroethene	ND	100 µg/Kg	44 n-Propylbenzene	ND	100 µg/Kg
10 Methyl tert-butyl ether (MTBE)	ND	50 µg/Kg	45 4-Chlorotoluene	ND	100 µg/Kg
11 1,1-Dichloroethane	ND	100 µg/Kg	46 2-Chlorotoluene	ND	100 µg/Kg
12 cis-1,2-Dichloroethene	ND	100 µg/Kg	47 1,3,5-Trimethylbenzene	ND	100 µg/Kg
13 Bromochloromethane	ND	100 µg/Kg	48 tert-Butylbenzene	ND	100 µg/Kg
14 Chloroform	ND	100 µg/Kg	49 1,2,4-Trimethylbenzene	300	100 µg/Kg
15 2,2-Dichloropropane	ND	100 µg/Kg	50 sec-Butylbenzene	130	100 µg/Kg
16 1,2-Dichloroethane	ND	100 µg/Kg	51 1,3-Dichlorobenzene	ND	100 µg/Kg
17 1,1,1-Trichloroethane	ND	100 µg/Kg	52 1,4-Dichlorobenzene	ND	100 µg/Kg
18 1,1-Dichloropropene	ND	100 µg/Kg	53 4-Isopropyltoluene	100	100 µg/Kg
19 Carbon tetrachloride	ND	100 µg/Kg	54 1,2-Dichlorobenzene	ND	100 µg/Kg
20 Benzene	ND	50 µg/Kg	55 n-Butylbenzene	210	100 µg/Kg
21 Dibromomethane	ND	100 µg/Kg	56 1,2-Dibromo-3-chloropropane (DBCP)	ND	600 µg/Kg
22 1,2-Dichloropropane	ND	100 µg/Kg	57 1,2,4-Trichlorobenzene	ND	400 µg/Kg
23 Trichloroethene	ND	100 µg/Kg	58 Naphthalene	ND	1,000 µg/Kg
24 Bromodichloromethane	ND	100 µg/Kg	59 Hexachlorobutadiene	ND	400 µg/Kg
25 cis-1,3-Dichloropropene	ND	100 µg/Kg	60 1,2,3-Trichlorobenzene	ND	400 µg/Kg
26 trans-1,3-Dichloropropene	ND	100 µg/Kg	61 Surr: 1,2-Dichloroethane-d4	92	%REC
27 1,1,2-Trichloroethane	ND	100 µg/Kg	62 Surr: Toluene-d8	95	%REC
28 Toluene	ND	50 µg/Kg	63 Surr: 4-Bromofluorobenzene	95	%REC
29 1,3-Dichloropropane	ND	100 µg/Kg			
30 Dibromochloromethane	ND	100 µg/Kg			
31 1,2-Dibromoethane (EDB)	ND	400 µg/Kg			
32 Tetrachloroethene	ND	100 µg/Kg			
33 1,1,1,2-Tetrachloroethane	ND	100 µg/Kg			
34 Chlorobenzene	ND	100 µg/Kg			
35 Ethylbenzene	ND	50 µg/Kg			

Reporting Limits were increased due to high concentrations of non-target analytes.

EnCore sample was not received within the 48-hour extraction holding time. Sample was extracted 3 days, outside of holding time, and analyzed per client request.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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PS
7/21/05

Report Date

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Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-01A
Client I.D. Number: 1523-SW3-10

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	13,000 µg/Kg
2	Acenaphthylene	ND	13,000 µg/Kg
3	Acenaphthene	ND	13,000 µg/Kg
4	Fluorene	ND	13,000 µg/Kg
5	Phenanthrene	ND	13,000 µg/Kg
6	Anthracene	ND	13,000 µg/Kg
7	Fluoranthene	ND	13,000 µg/Kg
8	Pyrene	ND	13,000 µg/Kg
9	Benzo(a)anthracene	ND	13,000 µg/Kg
10	Chrysene	ND	13,000 µg/Kg
11	Benzo(b)fluoranthene	ND	13,000 µg/Kg
12	Benzo(k)fluoranthene	ND	13,000 µg/Kg
13	Benzo(a)pyrene	ND	13,000 µg/Kg
14	Indeno(1,2,3-cd)pyrene	ND	13,000 µg/Kg
15	Dibenz(a,h)anthracene	ND	13,000 µg/Kg
16	Benzo(g,h,i)perylene	ND	13,000 µg/Kg
17	Surr: Nitrobenzene-d5	86	%REC
18	Surr: 2-Fluorobiphenyl	100	%REC
19	Surr: 4-Terphenyl-d14	94	%REC

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

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7/21/05

Report Date



Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-02A
Client I.D. Number: 1523-SW3-10 DUP

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	13,000 µg/Kg
2	Acenaphthylene	ND	13,000 µg/Kg
3	Acenaphthene	ND	13,000 µg/Kg
4	Fluorene	ND	13,000 µg/Kg
5	Phenanthrene	ND	13,000 µg/Kg
6	Anthracene	ND	13,000 µg/Kg
7	Fluoranthene	ND	13,000 µg/Kg
8	Pyrene	ND	13,000 µg/Kg
9	Benzo(a)anthracene	ND	13,000 µg/Kg
10	Chrysene	ND	13,000 µg/Kg
11	Benzo(b)fluoranthene	ND	13,000 µg/Kg
12	Benzo(k)fluoranthene	ND	13,000 µg/Kg
13	Benzo(a)pyrene	ND	13,000 µg/Kg
14	Indeno(1,2,3-cd)pyrene	ND	13,000 µg/Kg
15	Dibenz(a,h)anthracene	ND	13,000 µg/Kg
16	Benzo(g,h,i)perylene	ND	13,000 µg/Kg
17	Surr: Nitrobenzene-d5	85	%REC
18	Surr: 2-Fluorobiphenyl	89	%REC
19	Surr: 4-Terphenyl-d14	87	%REC

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
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Report Date

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Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-03A
Client I.D. Number: 1523-SW7

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	6,600 µg/Kg
2	Acenaphthylene	ND	6,600 µg/Kg
3	Acenaphthene	ND	6,600 µg/Kg
4	Fluorene	ND	6,600 µg/Kg
5	Phenanthrene	ND	6,600 µg/Kg
6	Anthracene	ND	6,600 µg/Kg
7	Fluoranthene	ND	6,600 µg/Kg
8	Pyrene	ND	6,600 µg/Kg
9	Benzo(a)anthracene	ND	6,600 µg/Kg
10	Chrysene	ND	6,600 µg/Kg
11	Benzo(b)fluoranthene	ND	6,600 µg/Kg
12	Benzo(k)fluoranthene	ND	6,600 µg/Kg
13	Benzo(a)pyrene	ND	6,600 µg/Kg
14	Indeno(1,2,3-cd)pyrene	ND	6,600 µg/Kg
15	Dibenz(a,h)anthracene	ND	6,600 µg/Kg
16	Benzo(g,h,i)perylene	ND	6,600 µg/Kg
17	Surr: Nitrobenzene-d5	81	%REC
18	Surr: 2-Fluorobiphenyl	85	%REC
19	Surr: 4-Terphenyl-d14	85	%REC

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

PS
7/21/05

Report Date

Page 1 of 1



Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-08A
Client I.D. Number: 1523-BS6

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Semivolatile Organics by GC/MS EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	6,600 µg/Kg
2	Acenaphthylene	ND	6,600 µg/Kg
3	Acenaphthene	ND	6,600 µg/Kg
4	Fluorene	ND	6,600 µg/Kg
5	Phenanthrene	ND	6,600 µg/Kg
6	Anthracene	ND	6,600 µg/Kg
7	Fluoranthene	ND	6,600 µg/Kg
8	Pyrene	ND	6,600 µg/Kg
9	Benzo(a)anthracene	ND	6,600 µg/Kg
10	Chrysene	ND	6,600 µg/Kg
11	Benzo(b)fluoranthene	ND	6,600 µg/Kg
12	Benzo(k)fluoranthene	ND	6,600 µg/Kg
13	Benzo(a)pyrene	ND	6,600 µg/Kg
14	Indeno(1,2,3-cd)pyrene	ND	6,600 µg/Kg
15	Dibenz(a,h)anthracene	ND	6,600 µg/Kg
16	Benzo(g,h,i)perylene	ND	6,600 µg/Kg
17	Surr: Nitrobenzene-d5	83	%REC
18	Surr: 2-Fluorobiphenyl	93	%REC
19	Surr: 4-Terphenyl-d14	90	%REC

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

JS
7/21/05

Report Date

Page 1 of 1



Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: T0102

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05071561-09A
Client I.D. Number: 1523-BS8

Sampled: 07/12/05
Received: 07/15/05
Analyzed: 07/19/05

Semivolatiles Organics by GC/MS EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	13,000 µg/Kg
2	Acenaphthylene	ND	13,000 µg/Kg
3	Acenaphthene	ND	13,000 µg/Kg
4	Fluorene	ND	13,000 µg/Kg
5	Phenanthrene	ND	13,000 µg/Kg
6	Anthracene	ND	13,000 µg/Kg
7	Fluoranthene	ND	13,000 µg/Kg
8	Pyrene	ND	13,000 µg/Kg
9	Benzo(a)anthracene	ND	13,000 µg/Kg
10	Chrysene	ND	13,000 µg/Kg
11	Benzo(b)fluoranthene	ND	13,000 µg/Kg
12	Benzo(k)fluoranthene	ND	13,000 µg/Kg
13	Benzo(a)pyrene	ND	13,000 µg/Kg
14	Indeno(1,2,3-cd)pyrene	ND	13,000 µg/Kg
15	Dibenz(a,h)anthracene	ND	13,000 µg/Kg
16	Benzo(g,h,i)perylene	ND	13,000 µg/Kg
17	Surr: Nitrobenzene-d5	81	%REC
18	Surr: 2-Fluorobiphenyl	103	%REC
19	Surr: 4-Terphenyl-d14	99	%REC

Reporting Limits were increased due to the hydrocarbons present in the sample.

ND = Not Detected

Roger Scholl

Randy Gardner

Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

[Signature]

7/21/05

Report Date



DAILY FIELD REPORT

Page 1 of 1

Date: 7/13/05

Job Name: <u>PEDLETON SITE #1523</u>		Job No.: <u>24-01.01</u>												
Address: <u>114 ST., BLDG #1523, CAMP PENDLETON</u>														
Client/Contractor: <u>EFR ENVIRONMENTAL SERVICES</u>														
<input checked="" type="checkbox"/> Field Report		<input type="checkbox"/> Notice to Comply												
Type of Service Performed:	<table border="0"><tr><td><input checked="" type="checkbox"/> Soil</td><td><input type="checkbox"/> Concrete</td><td><input type="checkbox"/> Structural Steel</td></tr><tr><td><input type="checkbox"/> Waterproofing</td><td><input type="checkbox"/> Asphalt Concrete</td><td><input type="checkbox"/> Pre-Stress Concrete</td></tr><tr><td><input type="checkbox"/> Fireproofing</td><td><input type="checkbox"/> Roofing</td><td><input checked="" type="checkbox"/> Engr. Observation</td></tr><tr><td><input type="checkbox"/> Masonry</td><td><input type="checkbox"/> Other</td><td></td></tr></table>		<input checked="" type="checkbox"/> Soil	<input type="checkbox"/> Concrete	<input type="checkbox"/> Structural Steel	<input type="checkbox"/> Waterproofing	<input type="checkbox"/> Asphalt Concrete	<input type="checkbox"/> Pre-Stress Concrete	<input type="checkbox"/> Fireproofing	<input type="checkbox"/> Roofing	<input checked="" type="checkbox"/> Engr. Observation	<input type="checkbox"/> Masonry	<input type="checkbox"/> Other	
<input checked="" type="checkbox"/> Soil	<input type="checkbox"/> Concrete	<input type="checkbox"/> Structural Steel												
<input type="checkbox"/> Waterproofing	<input type="checkbox"/> Asphalt Concrete	<input type="checkbox"/> Pre-Stress Concrete												
<input type="checkbox"/> Fireproofing	<input type="checkbox"/> Roofing	<input checked="" type="checkbox"/> Engr. Observation												
<input type="checkbox"/> Masonry	<input type="checkbox"/> Other													
Inspection Check List: <input type="checkbox"/> Soils Report <input type="checkbox"/> Plans <input type="checkbox"/> Specs. <input type="checkbox"/> RFI <input type="checkbox"/> Codes														
Building Permit #: _____ Plan File #: _____ DSA#: _____ OSHPD#: _____														
On-Site Equipment: <u>Bobcat 135 EXCAVATOR; DEERE 544 LOADER</u>														
<input type="checkbox"/> Tests Performed (see attached) <u>NO</u>		Sample Type: <u>MAX MAX x 1</u>												
<u>On-site 10:35 am</u>														
<ul style="list-style-type: none">• EXCAVATION OF CONTAMINATED SOIL, APPROX. 12' DEEP, 40' x 25' DIMENSION (IRREGULAR) - PHOTOS 1-9• INTO FORMATIONAL MATERIAL AT ~ 12" BGS<ul style="list-style-type: none">→ FORMATIONAL MAT'L IS SILTSTONE/SANDSTONE w/ COBBLES AND BOULDERS TO 18" Ø• WALLS ARE RELATIVELY VERTICAL AND FREE OF LOOSE DEBRIS + SLOUGH.• BOTTOM IS FIRM + UNYIELDING, CUT INTO FORMATIONAL MAT'L<ul style="list-style-type: none">→ SOME LOOSE MAT'L AND BOULDERS ARE AT BOTTOM→ REPORTEDLY WILL BE REMOVED/CLEANED PRIOR TO BACKFILL• BACKFILL - AS REPORTED BY CLIENT/CONTRACTOR:<ul style="list-style-type: none">→ 3/4" ROCK FROM 12 TO 2 FEET BGS, TAMPED w/ EXCAV. BUCKET + WHEEL ROLLED w/ LOADER→ UPPER 2 FEET NATIVE SOILS, to 95% (SAMPLED FOR MAX)														
		Time In/Out <u>1</u>												

CERTIFICATE OF COMPLIANCE: All of the observed work, unless otherwise stated, is in conformance with the approved plans and specifications and the workmanship provisions of the applicable code. For any "non conforming" items the contractor shall schedule for reinspection and retesting.

Inspectors Signature/Name: CHAD DAVIS Cert No. C59908

Approval Signature/Company/Name: _____ Date: _____



DAILY FIELD REPORT

Page 1 of 2

Date: 7/15/05

Job Name: PENDLETON #1523 Job No.: 24-01.01
 Address: Camp Pendleton, Bldg #1523
 Client/Contractor: _____

☒ **Field Report**

☐ **Notice to Comply**

Type of Service Performed: ☒ Soil ☐ Concrete ☐ Structural Steel
☐ Waterproofing ☐ Asphalt Concrete ☐ Pre-Stress Concrete
☐ Fireproofing ☐ Roofing ☐ Engr. Observation
☐ Masonry ☐ Other _____

Inspection Check List: ☐ Soils Report ☐ Plans ☐ Specs. ☐ RFI ☐ Codes

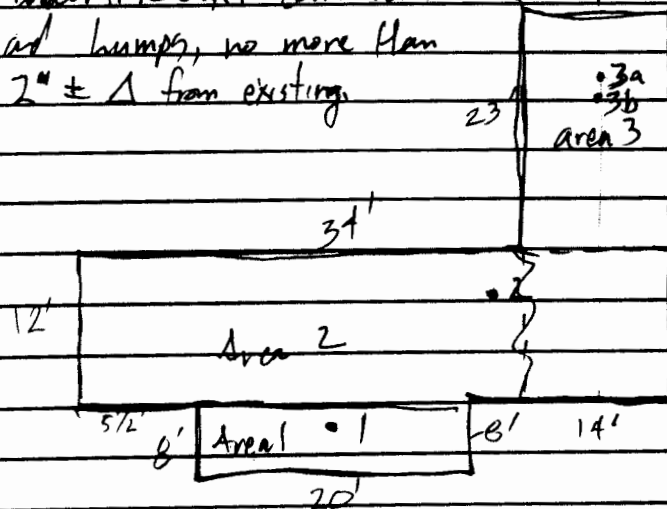
Building Permit #: _____ Plan File #: _____ DSA#: _____ OSHPD#: _____

On-Site Equipment: Vibe Roller - Wacker RD880

☒ Tests Performed (see attached)

Sample Type: _____

- On-site to test compaction of subgrade in parking/AC area.
 1+2 ok. 3a failed. Area re-rolled w/ vibe roller + retested. 3b
 Borderline O.K. Contractor will 9' finish surface to level depressions
 and bumps, no more than
 2" ± A from existing.



Area 1+2 - native
 mix w/ 3/4" rock.
 Area 3 - much less 3/4"

Rock

Note:

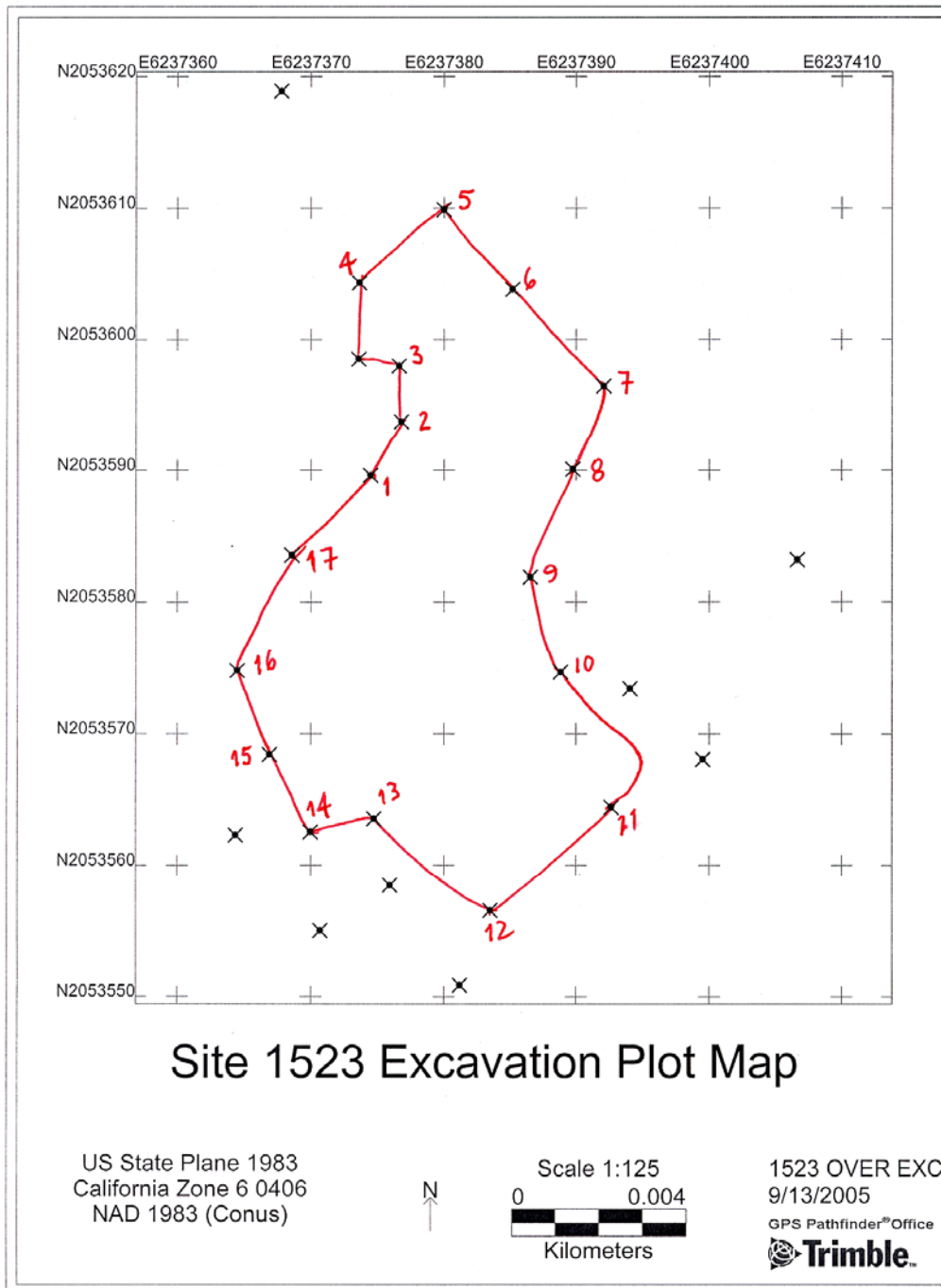
*Max based on non-mixed
 native, adjusted in lab
 theoretically to compensate
 for 3/4" rock. Actual
 max for the coming.

Time In/Out 8:00 am 9:

CERTIFICATE OF COMPLIANCE: All of the observed work, unless otherwise stated, is in conformance with the approved plans and specifications and the workmanship provisions of the applicable code. For any "non conforming" items the contractor shall schedule for reinspection and retesting.

Inspectors Signature/Name: CHAD DAVIS Cert No. C59908

Approval Signature/Company/Name: _____ Date: _____



ID	Easting	Northing
1	6237374.449	2053589.599
2	6237376.781	2053593.757
3	6237376.606	2053597.998
4	6237373.620	2053604.311
5	6237379.988	2053609.871
6	6237385.206	2053603.822
7	6237392.090	2053596.477
8	6237389.747	2053590.056
9	6237386.539	2053581.874
10	6237388.836	2053574.707
11	6237392.652	2053564.445
12	6237383.506	2053556.523
13	6237374.711	2053563.563
14	6237369.960	2053562.566
15	6237366.913	2053568.427
16	6237364.495	2053574.800
17	6237368.565	2053583.532

CANDELARIA ENVIRONMENTAL

N2 41240

BIOTREATMENT FACILITY**NON-HAZARDOUS MATERIALS HAULING MANIFEST**G
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NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) _____ COMPONENTS OF WASTE (PPM) _____
DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YESHANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-
HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE
APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: Nathaniel D. Delella DATE: 7-13-05
Signature / Print or Type Full Name

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COMPANY NAME BUDS PHONE NO. 619-561-3903
ADDRESS LUKASIOZ SERVICE ORDER NO. _____
CITY, STATE, ZIP 92040 PICK UP DATE 7-13-05
TRUCK TYPE: DUMP X ROLL OFF _____ OTHER _____

TRUCK LIC. # CD 75 529 TRUCK ID # 1202DRIVER NAME Gordon Temple TRAILER LIC. # _____DRIVER SIGNATURE Gordon Temple TRAILER ID # 12027P
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RTIME LEFT JOB 7:10 AMLOAD # 1

JOB SITE REPRESENTATIVE _____

Name

Signature

Deliver to facility Location:

CANDELARIA ENVIRONMENTAL

4001 Candelaria Lane

Anza, CA 92539

(951) 763-0129

Main office:

Phone: (619) 696-6207

FAX (619) 696-5117

24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTALN^o 41241**BIOTREATMENT FACILITY--****NON-HAZARDOUS MATERIALS HAULING MANIFEST**G
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NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP: CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)
DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YESHANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-
HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE
APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: *Manuel D. Delator*
Signature / Print or Type Full NameDATE: 7-13-05H
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COMPANY NAME WEST COAST ROCK SAND PHONE NO. 619 561-3903
ADDRESS P.O. BOX 1541 SERVICE ORDER NO. _____
CITY, STATE, ZIP LAKESIDE CA PICK UP DATE _____
TRUCK TYPE: DUMP ☒ ROLL OFF ☐ OTHER ☐

TRUCK LIC. # C474494 TRUCK ID # 964-15DRIVER NAME BILL BEAN TRAILER LIC. # HEC 1384DRIVER SIGNATURE *Bill Bean* TRAILER ID # _____P
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RTIME LEFT JOB 7:15 am LOAD # 2

JOB SITE REPRESENTATIVE _____

Name

Signature *[Signature]*

Deliver to facility Location:

CANDELARIA ENVIRONMENTAL

4001 Candelaria Lane

Anza, CA 92539

(951) 763-0129

Main office:

Phone: (619) 696-6207

FAX (619) 696-5117

24 hr Emergency (619) 696-6207 *[Signature]*

CANDELARIA ENVIRONMENTAL
BIOTREATMENT FACILITY
NON-HAZARDOUS MATERIALS HAULING MANIFEST

№ 41242

GENERATOR

NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008
CITY, STATE, ZIP: CAMP PENDLETON, CA 92055
PHONE NO.: (760) 725-4375/4321
APN: 2005-36

WASTE DESCRIPTION: NON-HAZ SOIL GENERATING PROCESS: UST LEAK
COMPONENTS OF WASTE (PPM):
DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YES
HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: [Signature] DATE: 7-13-05
Signature / Print or Type Full Name

HAULER

COMPANY NAME: WEST COAST
ADDRESS: P.O. BOX 1521
CITY, STATE, ZIP: CALICUSIDE, CA.
TRUCK TYPE: DUMP ☒ ROLL OFF ☐ OTHER ☐

PHONE NO.: (619) 443-4200

SERVICE ORDER NO.

PICK UP DATE: 7-13-05

TRUCK LIC. #: CP46011

TRUCK ID #: 917-27

DRIVER NAME: Peter Gores

TRAILER LIC. #: GT65959

DRIVER SIGNATURE: [Signature]

TRAILER ID #: 917-27T

PROCESSOR

TIME LEFT JOB: 7:20

LOAD #: 3

JOB SITE REPRESENTATIVE: [Signature]
Name

[Signature]
Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTAL
BIOTREATMENT FACILITY
NON-HAZARDOUS MATERIALS HAULING MANIFEST

N^o 41243

GENERATOR

NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP: CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)

DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YES

HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: *Anthony D. DeL...*
Signature / Print or Type Full Name

DATE: 7-13-05

HAULER

COMPANY NAME WEST COAST PHONE NO. (619) 443-4200
ADDRESS P.O. Box 1521 SERVICE ORDER NO.
CITY, STATE, ZIP LAKEVILLE, CA PICK UP DATE 7-13-05
TRUCK TYPE: DUMP ☒ ROLL OFF ☐ OTHER ☐

TRUCK LIC. # CP72599 TRUCK ID # 917-45

DRIVER NAME Michael Ellis TRAILER LIC. # 4EV9157

DRIVER SIGNATURE Michael Ellis TRAILER ID # 917-45

PROCESSOR

TIME LEFT JOB 7:30

LOAD # 4

JOB SITE REPRESENTATIVE

Name

Signature

Deliver to facility Location:

CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:

Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTALN^o 41244**BIOTREATMENT FACILITY****NON-HAZARDOUS MATERIALS HAULING MANIFEST**G
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NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP: CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)

DIESEL-IMPACTED SOILPROPERTIES: SOLID YESHANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: *Nathaniel D. Delecta* Nathaniel D. Delecta
Signature / Print or Type Full Name

DATE: 7-13-05H
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COMPANY NAME WEST COAST PHONE NO. (619) 443-4200
ADDRESS PO Box 1521 SERVICE ORDER NO.
CITY, STATE, ZIP LAKEVIEW, CA PICK UP DATE 7-13-05
TRUCK TYPE: DUMP ☒ ROLL OFF ☐ OTHER ☐

TRUCK LIC. # CP74492 TRUCK ID # 966-1DRIVER NAME JOHN BOUDRIEUX TRAILER LIC. # 4DF 3195DRIVER SIGNATURE *John Boudrieux* TRAILER ID # 966-1TP
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RTIME LEFT JOB 7:40 LOAD # 5

JOB SITE REPRESENTATIVE *Charles Clark* Charles Clark
Name Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTAL
BIOTREATMENT FACILITY
NON-HAZARDOUS MATERIALS HAULING MANIFEST

№ 41245

GENERATOR

NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)
DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YES
HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: *Nathaniel D. Delator* DATE: 7-13-05
Signature / Print or Type Full Name

HAULER

COMPANY NAME JUSTERS PHONE NO. 518-7086
ADDRESS 990 Aster Ave SERVICE ORDER NO.
CITY, STATE, ZIP EC CA 92001 PICK UP DATE 7-13-05
TRUCK TYPE: DUMP ☒ ROLL OFF ☐ OTHER ☐

TRUCK LIC. # 7M73028 TRUCK ID # JT-1

DRIVER NAME Richard Juster TRAILER LIC. # 4FL9684

DRIVER SIGNATURE *Richard Juster* TRAILER ID # JT-1T

PROCESSOR

TIME LEFT JOB 7:59 LOAD # 6

JOB SITE REPRESENTATIVE *Chris Carr* *Chris Carr*
Name Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTALN^o 41246**BIOTREATMENT FACILITY****NON-HAZARDOUS MATERIALS HAULING MANIFEST**G
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NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP: CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) _____ COMPONENTS OF WASTE (PPM) _____

DIESEL-IMPACTED SOILPROPERTIES: SOLID YESHANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: *Nathaniel D. Delgado* NATHANIEL D. DELGADO
Signature / Print or Type Full Name

DATE: 7-13-05H
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COMPANY NAME RODRIGO PHONE NO. 858-922-7742
ADDRESS 19288 RAMONA TRAILS DR. SERVICE ORDER NO. _____
CITY, STATE, ZIP: RAMONA CA 92065 PICK UP DATE 7-13-05
TRUCK TYPE: DUMP ☒ ROLL OFF ☐ OTHER ☐

TRUCK LIC. # CP74503 TRUCK ID # HR-1DRIVER NAME Henry Rodrigo TRAILER LIC. # DF2268DRIVER SIGNATURE *Henry Rodrigo* TRAILER ID # HR-1AP
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RTIME LEFT JOB 7:55 LOAD # 7JOB SITE REPRESENTATIVE *CHUCK CARR* *CHUCK CARR*

Name

Signature

Deliver to facility Location:

CANDELARIA ENVIRONMENTAL

4001 Candelaria Lane

Anza, CA 92539

(951) 763-0129

Main office:

Phone: (619) 696-6207

FAX (619) 696-5117

24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTAL
BIOTREATMENT FACILITY
NON-HAZARDOUS MATERIALS HAULING MANIFEST

N^o 41247

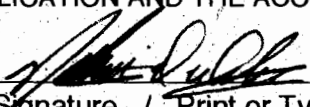
GENERATOR

NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) _____ COMPONENTS OF WASTE (PPM) _____
DIESEL-IMPACTED SOIL

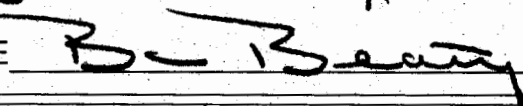
PROPERTIES: SOLID YES
HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY:  NATHANIEL D. Delella DATE: 7-13-05
Signature / Print or Type Full Name

HAULER

COMPANY NAME WEST COAST ROCK-SAND PHONE NO. 619 541-3903
ADDRESS P.O. Box 1561 SERVICE ORDER NO. _____
CITY, STATE, ZIP LAKEVILLE CA PICK UP DATE 7-13-05
TRUCK TYPE: DUMP ✓ ROLL OFF _____ OTHER _____

TRUCK LIC. # CP74494 TRUCK ID # 966-15
DRIVER NAME Bill Beatty TRAILER LIC. # 4EL1394
DRIVER SIGNATURE  TRAILER ID # 966-15-T

PROCESSOR

TIME LEFT JOB 11:15 AM LOAD # 8
JOB SITE REPRESENTATIVE _____
Name Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTAL
BIOTREATMENT FACILITY
NON-HAZARDOUS MATERIALS HAULING MANIFEST

NS 41248

GENERATOR

NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP: CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)
DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YES
HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: *Nathaniel D. Decker* DATE: _____
Signature / Print or Type Full Name

HAULER

COMPANY NAME BUD'S PHONE NO. 619-561-3903
ADDRESS LAKESIDE CA SERVICE ORDER NO. _____
CITY, STATE, ZIP 92040 PICK UP DATE 7-13-05
TRUCK TYPE: DUMP X ROLL OFF _____ OTHER _____

TRUCK LIC. # CP 74529 TRUCK ID # 1202-T

DRIVER NAME Gordon Tamplin TRAILER LIC. # _____

DRIVER SIGNATURE *Gordon Tamplin* TRAILER ID # 1202

PROCESSOR

TIME LEFT JOB 11:25 LOAD # 709

JOB SITE REPRESENTATIVE Frank Cooper *Frank Cooper*
Name Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTALN^o 41249**BIOTREATMENT FACILITY****NON-HAZARDOUS MATERIALS HAULING MANIFEST**G
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NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)

DIESEL-IMPACTED SOILPROPERTIES: SOLID YESHANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: [Signature] NATHANIEL D. DELGADO DATE: 7/13/05
Signature / Print or Type Full Name

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COMPANY NAME West Coast PHONE NO. 619561-3903
ADDRESS PO Box 1521 Lakeside SERVICE ORDER NO.
CITY, STATE, ZIP Cal 92120 PICK UP DATE 7-13-05
TRUCK TYPE: DUMP ROLL OFF OTHER

TRUCK LIC. # CP46011 TRUCK ID # 917-27DRIVER NAME Peter Gores TRAILER LIC. # GT65959DRIVER SIGNATURE [Signature] TRAILER ID #P
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RTIME LEFT JOB 1120 LOAD # 10JOB SITE REPRESENTATIVE Frank Caples
Name[Signature]
Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

[Signature]

CANDELARIA ENVIRONMENTAL

Nº 41250

BIOTREATMENT FACILITY**NON-HAZARDOUS MATERIALS HAULING MANIFEST**G
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NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP: CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) _____ COMPONENTS OF WASTE (PPM) _____

DIESEL-IMPACTED SOILPROPERTIES: SOLID YESHANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: [Signature] DATE: _____
Signature / Print or Type Full Name

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COMPANY NAME Juster's Trucking PHONE NO. 619 518-7086
ADDRESS 990 Aster Ave SERVICE ORDER NO. _____
CITY, STATE, ZIP EL CAJON CA 92026 PICK UP DATE 7-13-05
TRUCK TYPE: DUMP ☒ ROLL OFF ☐ OTHER ☐

TRUCK LIC. # 7M73028 TRUCK ID # JT-1
DRIVER NAME Richard Juster TRAILER LIC. # 4FC9684
DRIVER SIGNATURE [Signature] TRAILER ID # JT-1T

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RTIME LEFT JOB 1145 LOAD # 11JOB SITE REPRESENTATIVE Frank Caples
Name[Signature]
Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24 hr Emergency (619) 696-6207

[Signature]

CANDELARIA ENVIRONMENTALN^o 41251**BIOTREATMENT FACILITY****NON-HAZARDOUS MATERIALS HAULING MANIFEST**G
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NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP: CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)
DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YESHANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: [Signature] DATE: _____
Signature / Print or Type Full Name

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COMPANY NAME West Coast Rock & Sand PHONE NO. (619) 561-3903
ADDRESS P.O. Box 1521 SERVICE ORDER NO. _____
CITY, STATE, ZIP Ramona CA 92040 PICK UP DATE 7-13-05
TRUCK TYPE: DUMP X ROLL OFF _____ OTHER _____

TRUCK LIC. # CP72599 TRUCK ID # 91745
DRIVER NAME Michael Ellis TRAILER LIC. # HEV9157
DRIVER SIGNATURE Michael Ellis TRAILER ID # 91745T

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RTIME LEFT JOB _____ LOAD # 12JOB SITE REPRESENTATIVE Frank Caples
Name[Signature]
Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTAL
BIOTREATMENT FACILITY
NON-HAZARDOUS MATERIALS HAULING MANIFEST

Nº 41252

GENERATOR

NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP: CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)

DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YES

HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: *Matthew D. Dele*
Signature / Print or Type Full Name

DATE: 7-13-05

HAULER

COMPANY NAME Rodrigo Trucking PHONE NO. 858-922-7742
ADDRESS 19288 Ramona Trails Dr. SERVICE ORDER NO. _____
CITY, STATE, ZIP Ramona CA 92065 PICK UP DATE 7-13-05
TRUCK TYPE: DUMP _____ ROLL OFF _____ OTHER TT

TRUCK LIC. # 1B51 CP74503 TRUCK ID # HRT HR1

DRIVER NAME Henry Rodrigo TRAILER LIC. # 4DF2268

DRIVER SIGNATURE *Henry Rodrigo* TRAILER ID # HRT

PROCESSOR

TIME LEFT JOB _____ LOAD # 14

JOB SITE REPRESENTATIVE Frank Cuples
Name

Frank Cuples
Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTAL
BIOTREATMENT FACILITY
NON-HAZARDOUS MATERIALS HAULING MANIFEST

№ 41253

GENERATOR

NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)

DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YES

HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-
HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE
APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: *Norman D. DeLeon*
Signature / Print or Type Full Name

DATE: 7-13-05

HAULER

COMPANY NAME WEST COAST PHONE NO. (619) 443-4200
ADDRESS P.O. Box 1521 SERVICE ORDER NO. _____
CITY, STATE, ZIP LAKESIDE, CA PICK UP DATE 7-13-05
TRUCK TYPE: DUMP _____ ROLL OFF _____ OTHER _____

TRUCK LIC. # CD 74492 TRUCK ID # 966-1

DRIVER NAME JOHN BOURDEAUX TRAILER LIC. # 4DF3195

DRIVER SIGNATURE *John Bourdeaux* TRAILER ID # 966-1T

PROCESSOR

TIME LEFT JOB _____ LOAD # 13

JOB SITE REPRESENTATIVE *Frank Copley*
Name

Julia
Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTAL

N2 41254

BIOTREATMENT FACILITY**NON-HAZARDOUS MATERIALS HAULING MANIFEST**G
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NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) _____ COMPONENTS OF WASTE (PPM) _____

DIESEL-IMPACTED SOILPROPERTIES: SOLID YESHANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-
HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE
APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: K. J. K. Bergeron DATE: 7/14/05
Signature / Print or Type Full Name

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COMPANY NAME BUDIS PHONE NO. 619-561-3903
ADDRESS Lakeland, FL SERVICE ORDER NO. _____
CITY, STATE, ZIP 92040 PICK UP DATE 7-14-05
TRUCK TYPE: DUMP X ROLL OFF _____ OTHER _____

TRUCK LIC. # CP 74 529 TRUCK ID # 1202DRIVER NAME Gordon Thompson TRAILER LIC. # NEWDRIVER SIGNATURE Gordon Thompson TRAILER ID # 1202TP
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RTIME LEFT JOB 7:30 AM LOAD # 15

JOB SITE REPRESENTATIVE _____
Name Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTAL
BIOTREATMENT FACILITY
NON-HAZARDOUS MATERIALS HAULING MANIFEST

№ 41255

GENERATOR

NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) _____ COMPONENTS OF WASTE (PPM) _____

DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YES
HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: [Signature] K.H. Peterson DATE: 7/14/05
Signature / Print or Type Full Name

HAULER

COMPANY NAME WEST COAST PHONE NO. (619) 442-4200
ADDRESS P.O. Box 1521 SERVICE ORDER NO. _____
CITY, STATE, ZIP LAKESIDE PICK UP DATE 7-14-05
TRUCK TYPE: DUMP ☒ ROLL OFF _____ OTHER _____

TRUCK LIC. # CP74492 TRUCK ID # 966-1
DRIVER NAME JOHN BOUDREAU TRAILER LIC. # 4DF3195

DRIVER SIGNATURE [Signature] TRAILER ID # 966-1T

PROCESSOR

TIME LEFT JOB _____ LOAD # 16

JOB SITE REPRESENTATIVE _____
Name Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTAL
BIOTREATMENT FACILITY
NON-HAZARDOUS MATERIALS HAULING MANIFEST

№ 41256

GENERATOR

NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)

DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YES

HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: K. B. Kim Bergeron
Signature / Print or Type Full Name

DATE: 7/14/05

HAULER

COMPANY NAME BUDS PHONE NO. (619) 561-3905
ADDRESS PO Box SERVICE ORDER NO. _____
CITY, STATE, ZIP LAKE SIDES, CA PICK UP DATE 7/14/05
TRUCK TYPE: DUMP X ROLL OFF _____ OTHER _____

TRUCK LIC. # CP 74524 TRUCK ID # 1201

DRIVER NAME Michael Shackley TRAILER LIC. # Temp (new)

DRIVER SIGNATURE MH Shackley TRAILER ID # 1201T

PROCESSOR

TIME LEFT JOB _____ LOAD # 17

JOB SITE REPRESENTATIVE _____

Name

Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTAL

NO 41257

BIOTREATMENT FACILITY**NON-HAZARDOUS MATERIALS HAULING MANIFEST**G
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NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) _____ COMPONENTS OF WASTE (PPM) _____
DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YES
HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: [Signature] Kim Berpera DATE: 7/14/05
Signature / Print or Type Full Name

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COMPANY NAME MME PHONE NO. _____
ADDRESS 15898 OLIVE Hwy 80 SERVICE ORDER NO. _____
CITY, STATE, ZIP EL CAYON, CA PICK UP DATE 7-14-05
TRUCK TYPE: DUMP ☒ ROLL OFF _____ OTHER _____

TRUCK LIC. # 7U55019 TRUCK ID # 209

DRIVER NAME ROB. JOHNSON TRAILER LIC. # ~~209~~ 46B1972

DRIVER SIGNATURE [Signature] TRAILER ID # 209T

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TIME LEFT JOB 800 LOAD # 18

JOB SITE REPRESENTATIVE _____
Name Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

[Signature]

CANDELARIA ENVIRONMENTAL

NC 41258

BIOTREATMENT FACILITY**NON-HAZARDOUS MATERIALS HAULING MANIFEST**G
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NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP: CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)

DIESEL-IMPACTED SOILPROPERTIES: SOLID YESHANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: K. Bet Min Borjora
Signature / Print or Type Full Name

DATE: 7/14/05H
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COMPANY NAME Mountain Materials PHONE NO. 390 9932
ADDRESS Old Hwy 80 SERVICE ORDER NO. _____
CITY, STATE, ZIP Lakeside Ca 92029 PICK UP DATE 7-14-05
TRUCK TYPE: DUMP IT ROLL OFF _____ OTHER _____

TRUCK LIC. # 7D 22 388 TRUCK ID # 207DRIVER NAME Arvin Moorhouse TRAILER LIC. # ~~207~~ 4FM6789DRIVER SIGNATURE Arvin Moorhouse TRAILER ID # 207TP
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RTIME LEFT JOB 8:10 LOAD # 19

JOB SITE REPRESENTATIVE _____
Name Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTAL

N2 41259

BIOTREATMENT FACILITY**NON-HAZARDOUS MATERIALS HAULING MANIFEST**G
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NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP: CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)

DIESEL-IMPACTED SOILPROPERTIES: SOLID YESHANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: Kim Bergeron DATE: 7/14/05
Signature / Print or Type Full Name

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COMPANY NAME BUD'S PHONE NO. (619) 443-4200
ADDRESS LAKEVIEW CA SERVICE ORDER NO.
CITY, STATE, ZIP 92040 PICK UP DATE 7-14-05
TRUCK TYPE: DUMP X ROLL OFF OTHER

TRUCK LIC. # CD 74529 TRUCK ID # 1202DRIVER NAME Gordon Tamplin TRAILER LIC. #DRIVER SIGNATURE Gordon Tamplin TRAILER ID # 1202TP
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RTIME LEFT JOB _____ LOAD # 20

JOB SITE REPRESENTATIVE _____
Name Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

CANDELARIA ENVIRONMENTAL
BIOTREATMENT FACILITY
NON-HAZARDOUS MATERIALS HAULING MANIFEST

№ 41260

GENERATOR

NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) COMPONENTS OF WASTE (PPM)

DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YES

HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: K. Bel Kim Boipok
Signature / Print or Type Full Name

DATE: 7/14/05

HAULER

COMPANY NAME BUCS PHONE NO. (619) 561-3905
ADDRESS PO BOX 1521 SERVICE ORDER NO.
CITY, STATE, ZIP LAKESIDE CA PICK UP DATE 7/14/05
TRUCK TYPE: DUMP X ROLL OFF OTHER

TRUCK LIC. # CD72524 TRUCK ID # 1201
DRIVER NAME Michael Sanchez TRAILER LIC. # Temp - New
DRIVER SIGNATURE [Signature] TRAILER ID # 1201 T

PROCESSOR

TIME LEFT JOB 12:15 LOAD # 21
JOB SITE REPRESENTATIVE Name Signature

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207

[Signature]

CANDELARIA ENVIRONMENTAL
BIOTREATMENT FACILITY
NON-HAZARDOUS MATERIALS HAULING MANIFEST

No 41261

GENERATOR

NAME: AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)
ADDRESS: P.O. BOX 555008 PHONE NO. (760) 725-4375/4321
CITY, STATE, ZIP CAMP PENDLETON, CA 92055 APN: 2005-36

WASTE DESCRIPTION NON-HAZ SOIL GENERATING PROCESS UST LEAK
COMPONENTS OF WASTE (PPM) _____ COMPONENTS OF WASTE (PPM) _____
DIESEL-IMPACTED SOIL

PROPERTIES: SOLID YES
HANDLING INSTRUCTIONS: WEAR APPROPRIATE CLOTHING

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: [Signature] DATE: 7/14/05
Signature / Print or Type Full Name

HAULER

COMPANY NAME WEST COAST PHONE NO. (619) 443-4200
ADDRESS P.O. BOX 1521 SERVICE ORDER NO. _____
CITY, STATE, ZIP LAKEVIEW, CA PICK UP DATE 7-14-05
TRUCK TYPE: DUMP ☒ ROLL OFF _____ OTHER _____

TRUCK LIC. # CP74492 TRUCK ID # 966-1

DRIVER NAME JOHN BOUDREAU TRAILER LIC. # 4DF3195

DRIVER SIGNATURE [Signature] TRAILER ID # 966-1T

PROCESSOR

TIME LEFT JOB _____ LOAD # 22
JOB SITE REPRESENTATIVE _____
Name _____ Signature [Signature]

Deliver to facility Location:
CANDELARIA ENVIRONMENTAL
4001 Candelaria Lane
Anza, CA 92539
(951) 763-0129

Main office:
Phone: (619) 696-6207
FAX (619) 696-5117
24^{hr} Emergency (619) 696-6207 [Signature]

CANDELARIA ENVIRONMENTAL
BIOTREATMENT FACILITY
NON-HAZARDOUS MATERIALS HAULING MANIFEST

NO 41264

GENERATOR

NAME: <u>AC/S ENVIRONMENTAL SECURITY (UST SITE 1523)</u>	
ADDRESS: <u>P.O. BOX 555008</u>	PHONE NO. <u>(760) 725-4375/4321</u>
CITY, STATE, ZIP <u>CAMP PENDLETON, CA 92055</u>	APN: <u>2005-36</u>
WASTE DESCRIPTION <u>NON-HAZ SOIL</u>	GENERATING PROCESS <u>UST LEAK</u>
COMPONENTS OF WASTE (PPM) <u>DIESEL-IMPACTED SOIL</u>	COMPONENTS OF WASTE (PPM)
PROPERTIES: SOLID <u>YES</u>	
HANDLING INSTRUCTIONS: <u>WEAR APPROPRIATE CLOTHING</u>	

GENERATOR CERTIFIES THAT THESE WASTES ARE RCRA NON-HAZARDOUS, AND CALIFORNIA NON-HAZARDOUS, BASED ON THE INFORMATION PROVIDED BY THE GENERATOR ON THE SOIL ACCEPTANCE APPLICATION AND THE ACCOMPANYING LABORATORY DATA

BY: K. B. Jim Bergeron DATE: 7/14/05
Signature / Print or Type Full Name

HAULER

COMPANY NAME <u>Campbell & Sons TRANS</u>	PHONE NO. <u>(909) 322-3829</u>
ADDRESS <u>1222 Magnolia Ave</u>	SERVICE ORDER NO. _____
CITY, STATE, ZIP <u>CORONA</u>	PICK UP DATE _____
TRUCK TYPE: DUMP <u>✓</u> ROLL OFF _____ OTHER _____	
TRUCK LIC. # <u>WPD1635</u>	TRUCK ID # <u>C-6</u>
DRIVER NAME <u>Miles Campbell</u>	TRAILER LIC. # <u>4DU6702</u>
DRIVER SIGNATURE <u>Miles Campbell</u>	TRAILER ID # <u>T-19</u>

PROCESSOR

TIME LEFT JOB _____	LOAD # <u>26</u>
JOB SITE REPRESENTATIVE _____	
Name	Signature

Deliver to facility Location: CANDELARIA ENVIRONMENTAL 4001 Candelaria Lane Anza, CA 92539 (951) 763-0129	Main office: Phone: (619) 696-6207 FAX (619) 696-5117 24 ^{hr} Emergency (619) 696-6207
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LN

19104

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For:

AC/S Environmental

Generator

APN:

05-36

Manifest No.

41240

Carrier:

West Coast

Truck License No.

CP7SS29

Truck Trailer No. _____

Commodity: Non-Hazardous Soil/Material

WEIGHTS:

[] GROSS:

36.20

[] TARE:

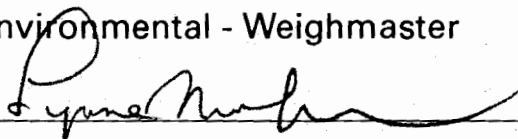
12.98

NET TONS:

23.22

Candelaria Environmental - Weighmaster
Gross & Tare

By:



Deputy

7-13-75

Date Weighed

19102

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For:

ACE Environmental

APN:

05-36

Manifest No.

41241

Generator

Carrier:

BDS966-15

Truck License No.

CP74497

Truck Trailer No.

4EC-4384

Commodity: Non-Hazardous Soil/Material

WEIGHTS:

[] GROSS:

39.22

[] TARE:

14.84

NET TONS:

24.38

Candelaria Environmental - Weighmaster
Gross & Tare

By:

Lynne R. [Signature]

Deputy

7-13-05

Date Weighed

19103

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: AC/S Environmental Generator

APN: 05-36 Manifest No. _____

Carrier: West Coast 917-27

Truck License No. CP46011

Truck Trailer No. GT65959

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 37.83

[] TARE: 14.31

NET TONS: 23.52

Candelaria Environmental - Weighmaster
Gross & Tare

By: Lynne Murphy Deputy

7-13-21 Date Weighed

19105

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: ACE Environmental GeneratorAPN: 05-36 Manifest No. 41243Carrier: West Coast 917-48Truck License No. CP 72599Truck Trailer No. 4 EV9157

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 38.80[] TARE: 12.76NET TONS: 26.04

Candelaria Environmental - Weighmaster
Gross & Tare

By: Lynne M. Miller Deputy7-13-05
Date Weighed

19106

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For:

ACS Environmental

Generator

APN:

05-36

Manifest No.

41244

Carrier:

Beds966-1

Truck License No.

CP 74492

Truck Trailer No.

4DF3145

Commodity: Non-Hazardous Soil/Material

WEIGHTS:

[] GROSS:

37.84

[] TARE:

14.35

NET TONS:

23.54

Candelaria Environmental - Weighmaster
Gross & Tare

By:

Lynne M. [Signature]

Deputy

7-13-25

Date Weighed

19107

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For:

AC/S Environmental

Generator

APN:

05-36

Manifest No.

41245

Carrier:

Stevens57-1

Truck License No.

7M 73228

Truck Trailer No.

4FC 9684

Commodity: Non-Hazardous Soil/Material

WEIGHTS:

[] GROSS:

38.26

[] TARE:

14.35

NET TONS:

23.91

Candelaria Environmental - Weighmaster
Gross & Tare

By:

Lynn Murphy

Deputy

7-13-05

Date Weighed

19108

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: ACS Environment GeneratorAPN: 05-36 Manifest No. 41246Carrier: Rodriguez HR-1Truck License No. CP 74503Truck Trailer No. 4DF2268

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 39.02[] TARE: 15.35NET TONS: 23.67

Candelaria Environmental - Weighmaster
Gross & Tare

By: Lynne Murphy Deputy7-13-05

Date Weighed

19109

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For:

ACIS Envir

Generator

APN:

05-36

Manifest No.

41247

Carrier:

Buck 966

Truck License No.

CP 4497

Truck Trailer No.

4EL1394

Commodity: Non-Hazardous Soil/Material

WEIGHTS:

[] GROSS:

39.47

[] TARE:

14.84

NET TONS:

24.63

Candelaria Environmental - Weighmaster
Gross & Tare

By:

Deputy

7-1305

Date Weighed

12111

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For:

AC/STENVOIR

APN:

05-36

Manifest No.

41248

Carrier:

Budy 1202

Truck License No.

CP 74529

Truck Trailer No.

Commodity: Non-Hazardous Soil/Material

WEIGHTS:

[] GROSS:

33.47

[] TARE:

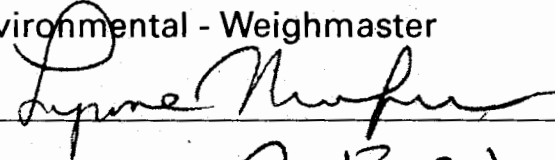
12.98

NET TONS:

20.49

Candelaria Environmental - Weighmaster
Gross & Tare

By:



Deputy

7-13-01

Date Weighed

19110

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: ACIS Envir

APN: 05-36 Manifest No. 41249 ^{Generator}

Carrier: Buelo 917-27

Truck License No. CP46011

Truck Trailer No. G+65959

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 3791

[] TARE: 1431

NET TONS: 23.60

Candelaria Environmental - Weighmaster
Gross & Tare

By: Lynne Schubert

Deputy

7-13-01

Date Weighed

19112

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For:

AC/SEHUIR

APN:

0536

Manifest No.

1135 Generator 41250

Carrier:

JUSTERS41250 IT 1

Truck License No.

7M73028

Truck Trailer No.

4FC9684

Commodity: Non-Hazardous Soil/Material

WEIGHTS:

[] GROSS:

40.44

[] TARE:

14.35

NET TONS:

26.09

Candelaria Environmental - Weighmaster
Gross & Tare

By:

[Signature]

Deputy

2-13-05

Date Weighed

19113

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: ACIS Envir Generator

APN: 05-36 Manifest No. 41257

Carrier: Bush 917-45

Truck License No. CP78549

Truck Trailer No. UE249.57

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 40.57

[] TARE: 12.76

NET TONS: 2781

Candelaria Environmental - Weighmaster
Gross & Tare

By: [Signature] Deputy

7-13-75 Date Weighed

19114

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: AC/SENVIRAPN: 05-36 Manifest No. 41252 GeneratorCarrier: Rodriguez HRATruck License No. CP74503Truck Trailer No. LIDF2268

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 38.04[] TARE: 15.35NET TONS: 2269

Candelaria Environmental - Weighmaster
Gross & Tare

By: Lynne Anderson Deputy7-13-75Date Weighed

12115

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For:

AC/SENVIR

APN:

25-36

Manifest No.

41253

Carrier:

Buds

966-1

Truck License No.

CP7440R

Truck Trailer No.

L112F3195

Commodity: Non-Hazardous Soil/Material

WEIGHTS:

[] GROSS:

39.48

[] TARE:

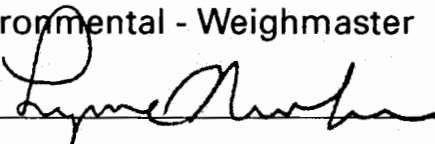
14.30

NET TONS:

25.18

Candelaria Environmental - Weighmaster
Gross & Tare

By:



Deputy

7-13-25

Date Weighed

19116

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: ACS Envir Sec
APN: 05 Manifest No. 411254
Carrier: Buds 120
Truck License No. CPT4529
Truck Trailer No. NEW

Commodity: Non-Hazardous Soil/Material

WEIGHTS:

[] GROSS:

35.82

[] TARE:

12.98

NET TONS:

22.84

Candelaria Environmental - Weighmaster
Gross & Tare

By: _____

Lynne Murphy

Deputy

7-14-05

Date Weighed

19117

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: ACIS ENVIR Generator

APN: 05-36 Manifest No. 41255

Carrier: Buds 966-1

Truck License No. CP74492

Truck Trailer No. 4DF3195

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 39.78

[] TARE: 14.30

NET TONS: 25.48

Candelaria Environmental - Weighmaster
Gross & Tare

By: Lynne Murphy Deputy

7-14-01 Date Weighed

19119

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: AC/S ENVIR. ~~SEC.~~ SEC.
Generator

APN: 05-36 Manifest No. 41256

Carrier: WEST COAST 1201

Truck License No. CPT4524

Truck Trailer No. NEW

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 37.98

[] TARE: 12.68

NET TONS: 25.30

Candelaria Environmental - Weighmaster
Gross & Tare

By: [Signature] Deputy

7-14-05
Date Weighed

19118

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: ACS Envir Sec Generator

APN: 05-36 Manifest No. 41257

Carrier: MOUNTAIN MAT. 209

Truck License No. 7455019

Truck Trailer No. 4GB1972

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 39.32

[] TARE: 14.55

NET TONS: 24.77

Candelaria Environmental - Weighmaster
Gross & Tare

By: [Signature] Deputy

7-14-01
Date Weighed

19120

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: AC/S ENVIR. SEC. Generator

APN: 05-36 Manifest No. 41258

Carrier: MOUNTAIN MAT. 207

Truck License No. 7P22388

Truck Trailer No. 4FM 6789

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 39.53

[] TARE: 12.76

NET TONS: 26.77

Candelaria Environmental - Weighmaster
Gross & Tare

By: [Signature] Deputy

7-14-05

Date Weighed

19121

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: AC/SENVIR. SEC. Generator

APN: 05-36 Manifest No. 41259

Carrier: WEST COAST 120

Truck License No. CP74529

Truck Trailer No. NEW

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 35.82

[] TARE: 12.98

NET TONS: 22.84

Candelaria Environmental - Weighmaster
Gross & Tare

By: [Signature] Deputy

7-14-05
Date Weighed

19122

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: AC/S ENVIR. SEC. Generator

APN: 05-36 Manifest No. 41260

Carrier: WEST COAST 1201

Truck License No. CP74524

Truck Trailer No. NEW

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 33.90

[] TARE: 12.68

NET TONS: 21.22

Candelaria Environmental - Weighmaster
Gross & Tare

By: Chad A. Holt Deputy

7-14-05
Date Weighed

19123

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: AC/S ENVIR. SEC. Generator

APN: 05-36 Manifest No. 41261

Carrier: WEST COAST 966-1

Truck License No. CP74492

Truck Trailer No. 4DF3195

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 37.66

[] TARE: 14.30

NET TONS: 23.36

Candelaria Environmental - Weighmaster
Gross & Tare

By: [Signature] Deputy

7-14-05
Date Weighed

19124

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: AC/S ENVIR. SEC. Generator

APN: 05-36 Manifest No. _____

Carrier: MOUNTAIN 209

Truck License No. TV55019

Truck Trailer No. 4GB1972

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 36.44

[] TARE: 14.55

NET TONS: 21.89

Candelaria Environmental - Weighmaster
Gross & Tare

By: [Signature] Deputy

7-14-05

Date Weighed

19125

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: AC/S ENVIR. SEC. Generator

APN: 05-36 Manifest No. 41263

Carrier: MOUNTAIN MAT.

Truck License No. 7P22388

Truck Trailer No. 4FM6789

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 40.83

[] TARE: 12.76

NET TONS: 28.07

Candelaria Environmental - Weighmaster
Gross & Tare

By: [Signature] Deputy

7-14-05
Date Weighed

19126

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurements Standards of the California Department of Food and Agriculture

Delivered To & Weighed At:

Candelaria Environmental - Weighmaster
4001 Candelaria Lane
Anza, California 92539
909-763-0129

Weighed For: ACLS ENVIR. SER Generator

APN: 05-36 Manifest No. 41264

Carrier: Compeller, Inc.

Truck License No. UP01635

Truck Trailer No. LI A U6702

Commodity: Non-Hazardous Soil/Material

WEIGHTS: [] GROSS: 49.52

[] TARE: 15.73

NET TONS: 3379

Candelaria Environmental - Weighmaster
Gross & Tare

By: Lynne Thompson Deputy

7-15-05 Date Weighed